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## WORLDWIDE AFFAIRS

### BRIEFS

ANTIMALARIA AGREEMENT SIGNED--An agreement involving a sum of \$20 million was signed between the governments of Sri Lanka, the United States, Britain and the Netherlands for a local anti-malaria campaign. A spokesman of the Health Ministry said that out of this total \$12 million was granted by the United States and \$4 million each by Britain and the Netherlands. [Colombo International Service in English 1045 GMT 31 May 78 BK]

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ARGENTINA

NEW CASE OF HEMORRHAGIC DISEASE APPEARS IN SANTA FE

Buenos Aires LA NACION in Spanish 14 Jun 78 p 6

[Text] Rosario--A new case of hemorrhagic disease was recorded in the rural sector of Bigand, Caseros Department, some 55 kilometers west of this city.

This is the seventh victim this year. The latest victim is Angel Barnardi, a 43-year-old Argentine who is married and resides in the area. He works as a farm laborer. He was taken to the Hemorrhagic Disease Center in Pergamino after the diagnosis by Dr Eduardo Vincenti.

This epidemic of the so-called stubbles disease has concerned the people in the area. The authorities of Police Regional Unit No. 4 based in Casilda asked the provincial chief of police to prohibit hunting since hunters who stay in camps in the area run the risk of contracting the disease by entering into contact with excrement from the rodents that carry the disease, retrieving game infected with the disease or eating an animal that is carrying the virus.

It was reported that lectures and talks are being given in that town to warn the population and inform them about the need to combat the rodents and carry out a prevention campaign which is the only effective way to avoid the disease.

The medical examiner in Bigand, Dr Antonio Rampello, took care of the first six victims and indicated that their neighbors have been warned about the dangers of an epidemic but they have not panicked. He added that preventive measures have been taken. Those who find themselves in contact with grains and oleaginous plants or work in the fields must be strict in hygiene, wash their clothes well, bathe every day, wash their hands constantly and not neglect any lesion, however small, since this can give access to the virus.

He pointed out the importance of an early diagnosis that would permit immediate treatment. As proof of it, he revealed that of the seven cases recorded until now (one of which was fatal), only two victims remain hospitalized in Pergamino. This includes the latest case that occurred the night before last.

ARGENTINA

MAR DEL PLATA TAKES PREVENTIVE ACTION AGAINST CHAGAS

Buenos Aires LA NACION in Spanish 20 Jun 78 p 8

[Text] Mar del Plata--"An initial observation permits us to presume that there is no Chagas disease in our region. Nevertheless, since the disease has entered the province of Buenos Aires, it is our duty to conduct the applicable study in our jurisdiction." This assurance was given in statements made to the press by Dr Daniel Maure, chief of the Research Department of the National Institute of Epidemiology which operates in this city.

"Trypanosoma cruzi," he added, "normally does not live in the vinchuca [a tick-like insect] or other insects of its family, but rather in man and some animals. We want to prevent infection, that is to keep the parasite from depositing its eggs in human beings, although the infection-disease relationship is relative. What happens is that the large number of infected persons in the country is the cause of the high number of sick persons. For that reason, within the framework of the national plan coordinated by the Futala Chaben Institute, an important program has been launched to disinfect the endemic regions, in addition to other measures which have been adopted with a view to total control."

Dr. Maure bases his presumptions that our region is not an area of infection upon studies conducted at the national level and a number of local research activities. He said that "5 years ago we collaborated with the military authorities in the examination of conscripts called into military service. On that occasion, we were able to make an important observation because, as you know, we belong to the Tandil Military District to which young men from the coastal and central regions of the province report for duty. From the serological examinations conducted to determine whether the disease was present, we were able to demonstrate that our figures are the lowest in the country, as regards this disease."

Dr Maure emphasizes that "it is important for the people to become familiar with questions such as the one we are analyzing which will permit them to have access to information traditionally relegated to scientific knowledge. However, that is not the best part of it," he went on to say. "The analysis should not cause alarm or unjustified expectations but rather should be conducted at the level of maturity always shown by our people."



ARGENTINA

BAHIA BLANCA REPORTS 40 NEW CASES OF CHAGAS

Buenos Aires LA NACION in Spanish 14 Jun 78 p 5

[Text] Bahia Blanca--Today personnel from the Jose Penna Hospital in this city will begin giving electrocardiographs and radiographic examinations at the hospital in Pedro Luro, Villarino district, of the approximately 50 victims of Chagas-Mazza disease in the area.

The existence of the disease in that region which had been uninfected was discovered months ago during a blood test of a volunteer donating blood for a transfusion.

Health authorities in the sector and then in Bahia Blanca worked immediately with the relatives of the victim and his neighbors and in the first few weeks verified that there were some 40 people infected. All are of Bolivian nationality and came from a region where the disease is endemic. They were immediately given emergency treatment.

The examinations that will begin today will be more extensive in order to establish the true scope of the disease.

Dr Hugo Bugarini, zone chief, reported on the situation in Bahia Blanca and revealed that many specimens of "vinchuca" have been captured recently but they were not carrying the disease. The examinations will establish whether the patients have organic lesions. The care of the rest of the inhabitants will mainly focus on using the media to give information about health standards in housing, destruction of the vectors and all the usual precautions in similar circumstances.

The victims belong to a migratory colony which has lived for some time in the lower valley of the Colorado River in irrigation areas approximately from Mayor Buratovich to Villalonga.

None of the victims is in serious condition. They are being treated to eliminate the parasite from their blood and thus prevent the cycle of contagion.

ARGENTINA

CHAGAS OUTBREAK IN PEDRO LURO REPORTED UNDER CONTROL

Buenos Aires LA PRENSA in Spanish 19 Jun 78 p 5

[Text] Bahia Blanca (Buenos Aires)--It was reported in the town of Pedro Luro that the outbreak of Chagas disease detected in a colony of workers in the intensive cultivation region in the districts of Villarino and Patagones is under control. There, 61 persons out of 100 inhabitants of a colony which has a nucleus of Bolivian laborers and their families were infected with the disease, according to blood tests to which they were subjected. Forty-five of these persons are under treatment, and it is estimated that they can recover in 90 days. Only one critical case was found, a boy with myocarditis from which he may recover.

At the Pedro Luro hospital it was stated that the first cases were detected some 4 months ago during the relocation activities engaged in by the Bolivian nationals assigned to the Valla Bonarense del Rio Colorado Cooperative.

During these relocation activities, blood samples were taken; and it was determined that of 22 persons examined 20 were infected with Chagas disease. At present, the number of cases is estimated at 100, most of whom are persons who reportedly already had contracted the disease when they settled in Pedro Luro.

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## ARGENTINA

### BRIEFS

NEW FUNGUS STRAIN--Buenos Aires (TELAM)--A type of fungus that causes skin lesions was discovered in Catamarca Province. During a scientific meeting at the National Academy of Medicine, Dr Pablo Negroni and Dr Marta Beatriz Negroni de Bonvehi presented a detailed report about Argentina's discovery of a new type of fungus--the "Microsporum racemosus"--which is capable of producing skin lesions commonly known as "tetter" and scientifically known as cutaneous "tinea" or dermatomycosis. They explained that in 1976 they began research in collaboration with Dr Carlos Bravo to determine the type of fungus that caused that type of skin lesion. They collected 135 specimens of soil from Catamarca Province which were analyzed at the Microbiology Center, Department of Microbiology, School of Medicine, University of Buenos Aires. This led to the detection of the "Microsporum racemosus," a fungus that lives in the soil, feeding on decomposing organic material. This variety was described for the first time in 1965 by Dr Dante Borelli in Venezuela. There are other varieties of fungi called "Trichophyton" and "Epidermophyton" which can also cause lesions on skin, nails and hair. [Text] [Bahia Blanca LA NUEVA PROVINCIA in Spanish 1 Jun 78 p 19] 7717

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THREAT OF HEPATITIS AT OOMBULGURRI SETTLEMENT

Perth THE WEST AUSTRALIAN in English 13 Jun 78 p 10

[Text]

**The Minister for Health, Mr Ridge, said yesterday that health authorities would investigate reports of an outbreak of hepatitis at Oombulgurri in the far north of WA.**

The investigation would include an assessment of conditions under which white advisers to the local Aboriginal community were living.

Mr Ridge was commenting on a report that members of the Institute of Cultural Affairs had contracted hepatitis and that the settlement might have to be cleared.

Mr Ken Colbung, chairman of the Aboriginal Lands Trust, who visited the settlement in the weekend, said yesterday that health authorities from Wyndham had been called in to assess the problem.

"About eight of the 12 whites from the ICA are down with hepatitis," he said.

"I am very worried that if it spreads to become an epidemic among the Oombulgurri people it could wipe them out because they have very little resistance to these diseases.

"I was shocked and disheartened by the conditions I found at Forrest River on Saturday. Since I was there 12 months ago a big pig pen has been built only about 40 metres from the house where the whites live.

"In the same time a big chicken house in the middle of the settlement has been expanded and I am afraid that both of these are health and hygiene risks.

**FRESH WATER**

"There is no fresh water available in the scheme system and that adds to the problem.

"The only answer I can see is to close it down as unfit for human habitation. The Aborigines seem quite healthy. But the whites are not."

Two weeks ago the Oombulgurri tribal council told members of the ICA to leave the reserve.

The ICA members, mainly Americans, had been working there for the past five years helping Aborigines to establish a farm.

Last week it was reported that the council had changed its mind and invited the ICA team back.

Mr Colbung said that the council would have to decide once and for all if the ICA people were to stay.

"It appears to me that the introduction of pigs and poultry so close to the living quarters has caused big problems," he said.

## AUSTRALIA

### BRIEFS

SALMONELLA DEGENERATION--Rottnest island habitat for salmonella, once an island of paradise and tourists on holiday. The animals and plants in the eco-system have been disturbed intensely. There has also been a human case of the salmonella infection reported. The environmental changes are partially due to tourism. [Perth THE WEST AUSTRALIAN in English 6 Jun 78 p 7]

CSO: 5400

ACTIVITIES OF RURAL HEALTH CENTER DESCRIBED

Kuala Lumpur BUSINESS TIMES in English 6 May 78 p 3

[Article by Mack Laing]

[Text]

**BICYCLE-RIDING**, women's liberation and justice for a murdered colleague are still the main topics of talk in Gonoshasthaya Kendra (the People's Health Centre) of Bangladesh.

The centre is a successful experiment in rural health care. Its 114 staff members include 22 paramedics, 12 doctors and three medical students who serve 100,000 in nearly 100 villages through four subcentres.

The health centre sent out its sixth report recently, its first in two and a half years.

It reflects the stubborn optimism of its outspoken leader, Dr Zafurullah Chowdhury, in the face of grinding poverty, frustration, and obstacles as extreme as hired assassination.

His newsletter speaks of:

● Justice — because more than a year after the 1976 beheading of 25-year-old paramedical worker Nizam Ahmed by nine thugs (a neighbour girl saw it all, says Dr Chowdhury), most of the killers and ringleaders,

who include a local official and a qualified doctor, are still free.

The leaders were released on bail after a few days in jail and the main hired killer freely roams the bazaar, says the news-letter, with police "unable to arrest him."

Nizam was killed while trying to open up a health subcentre at Shimulia, a move which threatened the local doctor's income from gouging patients, Dr Chowdhury told Depth-news Science Service last year.

But the subcentre was opened, says the report, and now — under double guard — serves the people of the Savar Thana area.

To underline the point, health workers last November walked five miles (eight kilometers) to the murder scene, the hidden burial spot in a pond (from where the headless body was identified by Nizam's mother) and to Nizam's grave at the health centre. The staff procession was followed by 800 villagers.

The report speaks of:

● Bikes and women's liberation — because the bicycle is now the common form of transport for paramedics, but because many are women, it has also become the symbol of female freedom, since local custom and religion frown on women bike-riders.

Says the report: "A mullah (religious leader) in a particularly conservative village had spoken out against the use of bicycles by female paramedics.

"Somebody from the project asked him how his mother had travelled to and from Dacca for her recent eye operation."

"The mullah replied she had travelled by bus and we reminded him how she was touched and jostled by unknown males, in contravention of accepted religion teaching, while, as we pointed out, a girl on a bicycle can be sure of keeping her self to herself."

"The mullah dropped his opposition."

People are still talking about the courageous demonstration of last May, when 23 women from the health project cycled all the way to Dacca.

Meanwhile, the burkas (veils) have almost vanished among women patients. Greater economic independence through creation of special projects for women has given them the increased self-confidence that comes from working outside the home.

The health centre has projects in agriculture, handicrafts, fish farming and runs a school, a family planning project and a credit scheme.

A man called Shofique, "a commerce graduate and convert from paper work," has been running the agriculture project for a year. He was found only after 40 candidates — all but two agricultural graduates — failed to score above 65 per cent on a simple practical test of farming ability.

Having found someone "willing to touch work in the fields rather than the paper work agriculture graduates are trained for," the centre is now self-sufficient in

rice with a recent harvest of 13 tons and is producing many of its own vegetables.

In the project's big fish tank, rumi — a cross between two local types of carp — of the first crop now weigh a kilo and a half.

Says the report, "They will be difficult to catch, as (thanks to following the experts in Dacca instead of the farmers of Savar) we made the tank too deep for effective netting. A visiting expert has proposed to bring the fish to the surface by stunning them with sub-lethal electric shocks."

Though knowledge is power, education is a luxury, the newsletter says, in a country where 46 per cent of children do not attend school.

"A boy who has studied up to 'matric' has earned himself exemptions from manual labour in the fields and has become useless to his peasant father. To marry off a girl who attended school up to class five, her father will not find anyone with less than 10 years' schooling willing to take her, and such bridegrooms are expensive."

The project school, started nine months ago, is scheduled to allow children time off to help with the crops. They often bring the animals they tend to school.

After three years use of the controversial injected contraceptive drug, Depoprovera, the centre is dropping it due to menstrual side-effects encountered: family planning is practised by 25 per cent of the area's fertile women.

In the last six months, paramedics treated 3,460 patients on village rounds by bike and 23,682 were seen in outpatient clinics. At the main centre, during the past two months, the injured of three big bus accidents — 10 to 30 in each case — were treated.

There were 30 deaths out of 421 admissions to the eight-bed main centre last year, but self-poisoning dropped from the main cause of death the year before to the number three cause. — Depthnews.

## BOTSWANA

### BRIEFS

DIPHTHERIA OUTBREAK--Tsienyane Primary School which is situated west of Serowe in the Central District has been ordered to close down for 2 weeks following the outbreak of diphtheria in Tsienyane Village. Mr J. G. Kesianyi who is acting as Chief Education Secretary in the district received a telegram from the Francistown Medical office, on Monday, informing him that the disease has been discovered in the village. The discovery was made in nine non-school going children in the village. The school has an enrollment of 601 children and is staffed with 18 teachers. According to Mr Kesianyi, the medical authorities have already stepped up vaccination campaign in the village to combat the disease. Early in March this year, Letlhakane Primary School was also ordered to close down when there was an outbreak of diphtheria in the area. Four children were reported to have died during the outbreak in Letlhakane. A spokesman of the Ministry of Health, in Gaborone Dr J. Moeti told the DAILY NEWS that he was not aware of the outbreak of the disease at Tsienyane but explained: "We have only been told of one case of diphtheria yesterday at Letlhakane." [Text] [Gaborone DAILY NEWS in English 22 Jun 78 p 1]

CSO: 5400



## BRAZIL

### MEETING HELD TO DISCUSS NORTHEAST HEALTH PROBLEMS

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 22 Jun 78 p 17

[Text] Ministry of Health technicians are seeking to make a careful assessment of the problems which have developed in the eight states in the northeast region in the course of the four years minister Almeida Machado has been in office in the course of a three-day meeting with secretaries of health in the northeast region which began yesterday in Natal. In this way, the minister can hand on to his successor a complete health picture for Brazil as of 1975, in which year the main demand of the secretariats was for authorization for construction to provide more hospital beds.

The minister of health wants to know, for example, how the states have used the federal funds allocated to the health sector, and whether the secretariats in the northeast are properly utilizing the resources provided for the establishment of public health laboratories, since up to the middle of last year, many states were up to a year behind in the use of financing, which was being held in the banks, thus hindering the development of the program in the region, to which the government had given priority.

Almeida Machado hopes to hold meetings similar to the private interview he had in Manaus last week with the secretaries of health from the north and center-west with the representatives of the northeast region on Friday. His purpose, as the regional coordinator, Joaquim de Castro, explained, is "to discuss the difficulties in the state sectors frankly and jointly to find short-term solutions for achieving the goals established in the programs for health surveyance, medication, nutritional and sanitation measures, epidemiological supervision and immunization, improvement of the public health laboratory network, and use of federal resources."

As only two of the eight health secretaries for the northeast (those in Piaui and Pernambuco) will complete their terms of office, the others having left their posts to run in the November elections, and also because the country is at the end of a government term, it is often commented that "perhaps Minister Almeida Machado does not have much justification for demanding explanations of the novices (in office about one month) for the lag seen in the establishment of the government programs."

One of the few who think otherwise is the health coordinator for the northeast region, Joaquim de Castro, who says he "believes in public administration as a process, wherein the replacement of secretaries and other individuals is unimportant."

Humberto Fassanaro, the secretary of health for Rio Grande do Norte, was as host the first to provide a full explanation of the programs being implemented in that state, where almost 126 million cruzeiros were invested in public health programs between 1973 and 1977.

Fassanaro described the introduction of the new health programs as the factor responsible for the great decline in infant mortality in Natal--from 150.5 infants per hundred thousand live born in 1968 to 76.2 per hundred thousand in 1977.

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## BRAZIL

### HEALTH PROBLEMS IN AMAZON REGION DISCUSSED

#### Increase in Leprosy

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 11 Jun 78 p 31

[Text] Despite the fact that the Amazon and center-west regions contain only 13.1 percent of the population of the country, 25.2 percent of the lepers registered with the Ministry of Health are found there. The seven states and three territories which make up these two regions are the focus of the highest rates of incidence for the disease and, with the exception of Roraima, leprosy is highly endemic there. The official figures reveal that there are 150,000 lepers, but some experts estimate that the figure now exceeds a million. This is the situation about which discussion will begin on Tuesday when a meeting of Amazon region health secretariat personnel begins in Manaus.

According to National Dermatological Health Division figures, the number of sufferers in that region has almost doubled in the past six years. While there were 120 cases of leprosy per thousand inhabitants registered in 1972, the figures for 1977 show 240 per thousand. In Para alone 780 new cases developed.

This substantial increase, according to Almeida Machado, the minister of health, is due to the active effort to find patients in the interior of the country and the decrease in the stigma attached to the disease, which kept sufferers away from treatment. This became possible thanks to the establishment of a policy of disease control, making the ambulatory treatment at health centers possible as of three years ago, the conversion of many leprosaria into general hospitals, as well as periodic checking of all individuals in contact with leprosy.

All of the pertinent figures will be set forth and examined during the First Regional Assembly of Amazon and Center-West Region Health Secretariats to be held in Manaus from 13 to 15 June. With a view to the perfecting of the National Disease Control Program for these regions, Minister Almeida Machado will introduce three innovations: he will launch two farm projects of a cooperative nature, with the participation of patients in Para and Amazonas;

he will expand coverage of the population with the participation of social security bodies; and he will create a Leprosy Control Company in these regions.

However, despite the new programs, the desired change in thinking about the problem, never far from the mind of the minister of health, is not yielding the expected results, experts say. Lepers continue to be excluded from society. They live in hospital-colonies, such as those in Curupati, Jacarepagua, in Rio de Janeiro, and in many of the northeastern states, where the facilities are still inadequate, lacking health personnel and an adequate diet.

#### Health Sector Shortcomings

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 15 Jun 78 p 18

[Text] Because of a series of problems, mainly the lack of infrastructure, funds and personnel, leprosy has a higher rate of incidence in the Amazon region than anywhere else in the country, while tuberculosis is commonly found among schoolchildren, mortality in high-risk childbirth is regarded as alarming, and communicable diseases require the hospitalization of large numbers of children under one year of age. This was the picture described yesterday in Manaus by the secretaries of health for the Amazon region, at the meetings being held with Almeida Machado, the minister of health. Although the situation shows that the implementation of the public health programs is falling far short of the goals sought by the government, the state health authorities indicated their willingness to change their thinking and to act in more efficient fashion so that the government programs can be achieved in the medium time range.

In analyzing the situation in Acre, where the highest incidence of leprosy in the country, 9.6 patients per thousand inhabitants, is found, Manoel Santos, state secretary of health, commented that if control of the disease had been begun 15 years ago as it is now, the disease would never have reached the alarming figures found in this region. According to the representative from Maranhao, the situation "is very bad" there too, and the incidence is 5.2 cases per thousand inhabitants in the Amazon region, according to the report of the National Dermatological Health Division.

In view of this situation, it was announced at the meeting, the INPS [National Social Security Institute], through its service offices, and the SUCAM [Superintendency for Public Health Campaigns], will participate in leprosy control in areas distant from the capital cities to which it is almost impossible to carry health aid to the patients. Less than a third of the population in the Amazon region is urban.

Cyro Resende, coordinator of the Ministry of Health maternity-infant program, for his part, indicated his desire to correct the report on the implementation

of the project in the state, where according to the secretaries' figures, coverage has reached 100 percent. He said that errors must exist because not even 30 percent of the pregnant women in the country are having pre-natal examinations. And he made himself clear: "This will not do. The program urgently needs to be reformulated."

In a report, Cyro Resende described the difficulties encountered by his program: low wages, a lag in the transfer of funds from the ministry, shortcomings in transportation, a lack of or nonfulfillment of supervision schedules, and an absence of solutions to the problems identified as well as others. In order to deal with these problems he suggested the creation of interprofessional teams to supervise the program, reorganization of the information system and greater speed in the transfer of funds allocated to the program in the region, which have been tripled in the past four years, increasing from 6,000,000 cruzeiros in 1975 to 18,000,000 in 1977, for the benefit of the 132,000 registered pregnant women.

Where tuberculosis is concerned, the rate of incidence in the Amazon region is 16.9 cases per thousand inhabitants, mainly affecting children when they first go to school. The director of the National Pneumological Health Division, Almir Gabriel, suggested treatment of the carriers of the bacillus and reduction of the hospitalization period for patients from 360 to 180 days.

The health minister termed the results of the meetings being sponsored with the state health secretaries, and ending today, "magnificent."

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BRAZIL

MENINGITIS OUTBREAK LEADS TO VACCINATION CAMPAIGN

Rio de Janeiro

Rio de Janeiro O GLOBO in Portuguese 15 Jun 78 p 12

[Text] The cases of meningitis which have occurred in private schools in Rio de Janeiro, and include a youth who frequented the Piraque Club, have led to a real run on the private vaccination clinics, to the point that in the past 20 days the Climuno has immunized more than 3,000 children.

The owner of the clinic, a health worker and professor of preventive medicine at the UERJ [State University of Rio de Janeiro], Dr Nelson de Moraes, regards parents' concern about the disease as natural, particularly for those whose children frequented places where there have been cases of meningitis. He explained that the vaccine is being given in accordance with pediatricians' prescriptions obtained by the parents, and not by private request.

"We have stocked the vaccine since the last outbreak of meningitis and we even believe that it should be a routine part of the immunization schedule. The minister of health himself admits that the number of cases occurring is higher than expected. In Florianopolis and Recife, the increase in the incidence of meningitis is more than obvious. If the ministry is concerned and is providing vaccine, it is because something is happening," the specialist said.

The vaccine being administered at Dr Nelson de Moraes' clinic was obtained from the Osvaldo Cruz Foundation, at a cost of 500 cruzeiros per flask of 50 doses. If these 50 doses are not administered on the day the vaccine is diluted in water--it is stored in freeze-dried form, being diluted just prior to vaccination--it is totally lost, the doctor said. This is because the vaccine is extremely perishable. The solution deteriorates if it is not kept at a temperature of -20 degrees. The doctor further said that a certain investment is necessary in order to be able to work with such vaccines, and that for this reason his clinic charges 200 cruzeiros per dose administered.

## Schedule

Pediatrician Edgar Bicalho holds the view that the vaccine against meningitis should be included in the compulsory vaccination schedule, which includes BCG (against tuberculosis), the triple vaccine (against diphtheria, tetanus and whooping cough), the double vaccine (against diphtheria and tetanus), Sabin vaccination (against polio), and immunization against smallpox and measles.

He came to this view after the epidemic outbreak of meningococcic meningitis which occurred in 1974 and 1975. He now advises all parents who consult him to vaccinate their children against the disease, in particular those under 10 years of age.

## Mato Grosso do Sul

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 14 Jun 78 p 14

[Text] An epidemic outbreak of meningococcic meningitis has been reported in Bela Vista, Mato Grosso do Sul, and also in the Paraguayan city of Bella Vista, according to statements released in Campo Grande by attorney Carlos Medeiros. He visited the Brazilian city on the Paraguayan frontier yesterday, accompanied by Dr Walter de Castro, a federal deputy and former president of the health committee of the chamber, who was expected to meet with Almeida Machado, minister of health, today, to request urgent measures with a view to launching a vaccination campaign.

The doctors at Sao Vicente de Paula Hospital have reported the death of two children, while nine are being treated. Two of them are from the Paraguayan city of Bella Vista. The doctors reported that they have already sent an urgent appeal for help to the state secretariat of health, but that no steps have as yet been taken by the authorities.

During the national campaign in 1976, the citizens of Bella Vista in Paraguay were also vaccinated by the Brazilian teams, and this is likely to happen again now.

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BRAZIL

DISEASE COULD ELIMINATE AMAZON REGION TRIBE

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 8 Jun 78 p 19

[Excerpt] Outbreaks of malaria, pneumonia and tuberculosis are decimating the Wawanaviteri Indian tribe which lives in Pico da Neblina, on the boundary between the state of Amazonas and Venezuela. In recent years, this community has been reduced from 500 to 150 members, leading the Brazilian Air Force to dispatch an emergency mission to aid the people. The region is difficult of access and can be reached only by plane. A medical team and another Salesian missionary have been flown in to aid the sick and to try to prevent the extinction of the tribe.

The diseases are transmitted to the Indians by small pioneer groups of cat and deer hunters and woodcutters located in the region. The Wawanateri were attracted to the Cauabori River, a tributary of the Negro River, in the extreme northwestern part of Amazonas, by the Salesian mission. There they built a settlement and expanded their crop activities, but the presence of the white man immediately began to cause health problems. Suffering from malaria, pneumonia and tuberculosis, the tribe found itself reduced to 1/3 of its former size and the 150 remaining members decided to divide into two groups, and went into the heart of the jungle again. Several days ago a number of Indians died and the others no longer have any hope of surviving.

At the end of May, the Brazilian Air Force began making flights to help the Indians, using a helicopter. The medical team found a decaying settlement and a desolate picture. The doctor and the nurse will attempt to contain the diseases and to revive the community, now back in the jungle and in an area difficult to reach.

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## BRAZIL

### IMMUNIZATION REACHING SMALL PERCENTAGE OF CHILDREN

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 7 Jun 78 p 12

[Text] Brasilia--Of the five million in the "target population"--infants up to one year of age--who are to be immunized throughout the country this year, only 600,000, or a little over 10 percent, have as yet received immunization against polio and measles and the triple vaccine (whooping cough, tetanus and diphtheria). These figures were provided by the Public Health Services Foundation. Only the state of Rio Grande do Norte failed to supply data on the vaccine doses administered. The other states reported on the program from January through March.

Although the national vaccination program has achieved only 20 percent of the goal established by the Ministry of Health last year, Minister Almeida Machado believes that the achievement of this percentage by March "is quite good." According to the SESP [Special Public Health Service] foundation, only in the federal district was the vaccination of the entire infant population against whooping cough, tetanus and diphtheria completed in the first three months of this year, and Sao Paulo was the only state which achieved the goal for immunization against polio.

Almeida Machado termed the drop in the incidence in communicable diseases in the state of Sao Paulo in the course of last year as a result of immunization significant. In his view, the program has succeeded in changing the thinking in the majority of the state secretariats of health, which previously considered immunization statistics "a means rather than an end." He criticized the "concern of some secretaries with sending in figures and counting the number of vaccine doses administered as if this were everything."

Of the five compulsory immunizations included in the program, the worst lag throughout the country is in the program for protection against smallpox (21.8 percent) followed by measles (33 percent), the disease responsible for the highest indices of hospitalization and infant mortality. Next comes polio (36.2 percent), with the triple vaccine revealing the best results (37.6 percent).

Apart from Sao Paulo, which immunized the entire "target population" against polio in the first three months of this year, Rio Grande do Sul reached 60 percent of the goal, and the territory of Roraima 20 percent, a result which the minister himself termed "strange," because this has always been among the rather backward areas.

Of the 24 states reporting to the ministry on vaccines administered this year, the lag in the realm of immunization is worst in Maranhao, where only 1.9 percent of the population was given the triple vaccine, 2.5 percent the measles vaccine and 3.2 percent that for smallpox. Only Amazonas revealed a more serious lag in immunization against measles, having reached only 1.8 percent of its population under one year of age.

By January Sao Paulo had vaccinated 45,806 children against polio, 42,880 against measles, 44,595 had been given the triple vaccine, and 34,539 immunized against smallpox. Rio Grande do Sul had by March immunized 63.3 percent of the population against polio, 58 percent against measles, 36.3 percent against smallpox, and 63.6 percent had been given the triple vaccine. By February Rio de Janeiro had immunized 50.2 percent against polio, 25.8 percent against measles, administered the triple vaccine to 56.6 percent and immunized 26.9 percent against smallpox.

In general, the states in the northeast fell below the level regarded as satisfactory by the Ministry of Health. Pernambuco had attained 9.1 percent of the goal for vaccination against smallpox; Alagoas 19.5 percent for vaccination against polio; Paraiba 9 percent for vaccination against smallpox and 11.8 percent for polio; Bahia 8.6 percent for measles and 9.1 percent for smallpox. Sergipe was the only state achieving slightly over 20 percent of the goal figures for all vaccines.

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CSO: 5400

BRAZIL

SABIN VACCINE AGAINST POLIO ADMINISTERED

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 16 Jun 78 p 11

[Text] The secretary of state estimates that at least 250,000 children have been immunized in the ninth intensification stage of the vaccination campaign against infantile paralysis carried out in the capital of the state yesterday, at 530 stations distributed among the health centers, schools, parish houses and neighborhood friendship associations. According to secretary Walter Leser, these children represent only a small proportion of the persons "missed" by the Sabin vaccination program which is normally administered at the state and prefecture health centers.

On the 26th of this month, the same vaccination system will be used to immunize children from two months to three years of age throughout greater Sao Paulo. More than a thousand persons will be mobilized and it is hoped that 150,000 children can be immunized. The vaccination against polio is a part of the compulsory immunization program for children up to one year of age, and as of January 1979, will have to be noted on each child's health card before an employee can collect his family allocation.

Last year, according to health secretariat figures, the sixth, seventh and eighth intensification stages in the Sabin program were carried out in June, August and November, and about a million children between two months and three years of age were vaccinated. That same year, the secretariat was successful in immunizing 96.6 percent of the children under one year of age, and 97 cases of the disease were reported.

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## BURMA

### DECREASE IN CASES OF DENGUE HAEMORRHAGIC DISEASE

Rangoon THE WORKING PEOPLE'S DAILY in English 17 Jun 78 p 1

[Text] The incidence of dengue haemorrhagic disease as well as the number of fatalities fell noticeably in Rangoon Division in the first five months of 1978 as compared to the corresponding period in 1977, according to reports received by the Central Epidemiological Unit of the Health Department.

The CEU recorded more than 600 dengue cases with 16 fatalities in Rangoon Division during the first five months of 1977. This fell to 160 cases with only one fatality during the same period in 1978.

Pegu Division recorded 18 cases with two fatalities with the majority of cases occurring in Waw Township.

The disease, which was first detected in Rangoon Division in 1965, reached epidemic proportions in 1970. It later spread to other regions.

Records show five dengue cases with one fatality in 1965, one case with one fatality in 1966, two cases with one fatality in 1967, five cases with one fatality in 1968, and five cases with one fatality in 1969.

The Health Department recorded 1,654 cases with 81 fatalities in 1970, 685 cases with 54 fatalities in 1971, 1,013 cases with 32 fatalities in 1972, 349 cases with 15 fatalities in 1973, 2,398 cases with 139 fatalities in 1974, 6,750 cases with 363 fatalities in 1975, and 3,153 cases with 98 fatalities in 1976.

Dengue haemorrhagic is an infectious, eruptive, febrile disease, caused by a virus which is transmitted by the bite of the mosquito *Aedes aegypti*.

It comes on suddenly marked by severe pains in the head, eyes, muscles, and joints, sore throat, catarrhal symptoms, and sometimes a cutaneous eruption and painful swelling of the parts.

The disease comes on suddenly after an incubation period of from three to six days. The symptoms increase in severity for two or three days, then decrease somewhat, only to increase again on the fourth or fifth day, at which time the eruption appears.

Children of under ten-years are most susceptible to the disease.

The most effective way to prevent the disease is the eradication of the mosquitoes *Aedes aegypti* and elimination of breeding grounds for these mosquitoes.

CSO: 5400

# FILARIA FOUND IN 4 PERCENT OF RANGOON POPULATION

Rangoon THE WORKING PEOPLE'S DAILY in English 1 Jun 78 p 1

[Text] The Filariasis Control Unit of the Health Department has discovered that four percent of the population of Rangoon is microfilaria positive.

In order, therefore, to stem the incidence of the disease arrangements are being made to step up environmental sanitation as a mass movement.

*Culex fatigan* mosquitoes which are carriers of the disease have been found to be breeding fast as a result of damaged sewerage system, increasing amount of garbage dumped in the back lanes and drains. This results in the blockage of drains thereby forming good breeding grounds for *culex fatigan* mosquitoes. Added to this is the habit of residents making use of the drains to get rid of human refuse.

A research team which has been carrying out research work throughout the country found out that almost every region about 4,300 feet below sea level is a good breeding ground for *culex fatigans*. These mosquitoes are found even in Kalaw which is 4,300 feet above sea level.

The Filariasis Control Project was begun in Burma in 1970. Spraying teams went to work specifically in townships of the Rangoon Division and in the Rangoon City Development area.

They worked in co-operation with Township Medical Officers posted in the secondary health centres. They also carried out research work by testing mosquitoes bred in the region.

Filariasis which was prevalent among destitutes who lived on pavements along the roads has now spread among city dwellers.

Patients inflicted with the disease who sought treatment at the Rangoon General Hospital and at the Township Health Centres averaged about 1,000 every year.

The disease is more common among males who are older than 15 years. Very few children under the age of ten years are infected by the disease.

If treatment is taken in the initial stage of the disease it can be cured after only 21 days. But if treatment is sought when the disease is in the advanced stage, it is difficult to cure.

The disease is contracted following frequent bites by *culex fatigans* between a period of one year to three years depending on the constitution of the victim.

BURMA

TEAM INOCULATES AFTER CHOLERA SCARE AT NATTALIN

Rangoon THE WORKING PEOPLE'S DAILY in English 2 Jun 78 p 1

[Text]

NATTALIN, 30 May—A cholera epidemic which broke out here has claimed the life of one person and four others have been warded at the hospital.

Two health teams led by Township Health Officer Dr Nyunt Lwin have been inoculating the people against cholera in residential wards since 29 May.

Members of the teams have also been chlorinating more than 300 wells, and organizing the people to carry out sanitation work. At the same time they have been banning the sale of food which can cause gastro enteric disorders.

Cholera cases have also been reported in Kantha, Kyandawsu and Kyungalay village-tracts. Personnel of rural health centre are now inoculating the people against cholera and carrying out other preventive measures.(077)

CSO: 5400

BURMA

CHOLERA REPORTED AT MOHNYIN

Rangoon THE WORKING PEOPLE'S DAILY in English 1 Jun 78 p 1

[Text]

MOHNYIN, 27 May—A cholera epidemic which broke out in this township has claimed the lives of 19 adults and children since the first week of May.

The epidemic reportedly started from Indawgyi area.

Thirteen fatal cases were recorded in Nang Mun village, four in Mong Nawng village and two in Mohnyin.

Although several cases were reported in Lone Tone and Hopin villages, there were no fatalities.

Party, Council and Health authorities are taking appropriate measures to stop the outbreak by administering oral cholera injection to everyone, chlorinating wells, clearing drains in the bazaar and congested residential areas and temporarily banning of the sale of food which can easily cause gastro enteric disorders.—(245)

CSO: 5400



## BURMA

### BRIEFS

CHOLERA PREVENTION IN AKYAB--Akyab, 22 Jun--Of 77 persons receiving treatment for gastro enteric disorders at Township Hospital here, three died up to 21 June. It was estimated that at least 15 persons died of cholera in the residential quarters here since 2 June. Environmental sanitation work has been carried out in 16 wards in the town by the working people including Lanzin Youths and Health Department personnel. They cleared the drains blocked by waste materials and removed garbage. Township Party Unit Chairman U Tun Maung, Township People's Council Chairman Major Sit Aye, Arakan State head of Health Department U Aung Thu, Township Medical Officer U Maung Maung Swe and malaria combating team leader Dr Kyee Myint and Party supervised the sanitation work. Educative talks for prevention of cholera were also held in the town. [Text] [Rangoon THE WORKING PEOPLE'S DAILY in English 26 Jun 78 p 1]

CSO: 5400

## COLOMBIA

### BRIEFS

DEATHS FROM YELLOW FEVER--The Health Ministry today reported that 34 persons have died from yellow fever and typhoid in the departments of Bolivar and Norte de Santander. [Bogota Cadena Radial Super in Spanish 0000 GMT 28 Jun 78 PA]

MALARIA DEATHS REPORTED--There is alarm among the residents of San Pablo, Bolivar department, where an epidemic of malaria has already resulted in 22 deaths. The authorities have already begun a widespread vaccination program and many of the patients have been transferred to Puerto Wilches, where health authorities have set up a medical attention center with several doctors and nurses attending. The vaccination program has been extended to all of Bolivar department and border areas. [Bogota Cadena Radial Super in Spanish 1100 GMT 28 Jun 78 PA]

MALARIA CASES DETECTED--Cali, Colombia--A total of 154 malaria cases have been detected in this city following the discovery of this illness on the islands of (Guanchaco) and (La Bucana), located in the Pacific Ocean, according to the director of the Malaria Eradication Service. He added that tourist traffic to these islands has decreased by 80 percent, which makes it possible to control the disease better. [Bogota Cadena Radial Super in Spanish 1100 GMT 30 May 78 PA]

CSO: 5400

GREECE

DOCTORS CHARGE GOVERNMENT FAILURE TO IMPROVE PUBLIC HEALTH

Athens TO VIMA in Greek 13 Apr 78 p 2

[Article by Nikitas Orfanidis]

[Text] The hospital doctors throughout the nation have decided to throw most of the weight of their strivings into substantially improving the care which is given to the Greek people--while continuing at the same time in their efforts for the satisfaction of their demands, which are aimed at securing better working, training, and pay conditions. This change of tactics was announced yesterday at a press conference by the president of the Union of Doctors of Athens-Piraeus Hospitals [EIN], Franglinos Papadellis, who was also speaking on behalf of the other four unions of hospital doctors in the country. Mr Papadellis stressed that the time has come for a reorientation of the movement of hospital doctors to an all-Greece scale, the objective being close cooperation with the other union organizations in the effort to get the government to make assurances it will find the called-for solutions in the much-afflicted sector of public health. The hospital doctors will struggle to secure their active participation in the fixing of policies not only on health, but also on cost-of-living adjustment increases, investments, and on interventions by the monopolies, continued the president of the EIN.

"One year after the announcement of the government's intentions concerning changes in the sector of public health," stressed Papadellis, "no measure has been taken, nor has any proposal for expediting the necessary solutions even been studied, whereas the problems continue to exist and to become more acute daily--to such an extent that no one can doubt that "radical surgery" is needed in the sector of public-health care. However, according to all the indications, nothing of this sort is going to happen in the immediate future. On the contrary, various reports and evaluations concur in indicating that a deliberate shrinking of the gains of the hospital doctors is being planned, by means of "innovations" in medical training, in working conditions, and in the organization of the clinics.

"We are once again making note of various issues which have been raised through our struggles in recent years and on which we have committed ourselves for the sake of the Greek people, and we are asking all the concerned parties--government, political parties, local self-government bodies, unions, and organizations--to help to set in motion the procedures which will lead to the resolution of these issues. These issues are: The instituting of procedures for the creation of a unified health agency, an increase in state expenditures for health, discontinuance of the financing of private clinics and the establishment of a quality control procedure for these clinics, municipal control of the hospitals, modernization and codification of the public-health laws, the instituting of a national pharmacopoeia, and the founding of a national pharmaceutical industry."

In order to make preparations for the common policy which will be followed by the hospital doctors of the five unions in the country, an all-Greece conference is to be convened from 4 to 6 June in Salonica, with the themes: Immediate and long-range issues of the hospital doctor. Medical training and post-graduate study. Creation of a federation of hospital doctors.

In a recent joint conference, the six unions of hospital doctors decided to coordinate their activities with respect to those issues of their profession which were submitted to the Ministry of Social Services 5 months ago and which are still unresolved there--requests which were also submitted long ago to the predecessors of the present minister. The doctors are placing special emphasis on the matter of the new salary schedule and the equalization of all the hospital doctors in this schedule, "which not only is being unwarrantedly delayed, but also is being curiously mixed up with reductions in the extra benefits of the rural doctors who are working in hospitals in the provinces."

In a joint announcement, the six unions of hospital doctors are making the following charges:

Against the unacceptable action of the Audit Board, which under legalistic pretexts is cutting out all the extra benefits given to those hospital doctors who are under an obligation to serve in the countryside, and which is reducing the pay of these doctors by at least 4,000 drachmas. The unions are asking for the restoration of the curtailed benefits until the special bill on the rural doctors can be voted on.

Against the attitude of the Ministry of Social Services, which permitted the above decision to be made.

Against the continuing unjust policy of the government vis-a-vis the new doctors. Whereas Law 754/78 on increases in the lower salaries was announced with drum rolls, the pay of hospital doctors obligated to serve in rural areas is less than doubled.

About a month ago, the administration of the Korinthos State Hospital suddenly stopped giving meals to the doctors of this hospital, without giving the slightest explanation for its decision, charge the doctors who are involved.

The doctors of the Tripolis Psychiatric Hospital are making strong protests over the fact that the administration of this institution insists on paying the doctors for only 11.5 hours of the 18.5 hours which they work overtime on their duty tours.

Some 10 months after the issuing of Law 643/1977, by which the specialty rating of general practitioner is granted to those rural doctors who have had previous service longer than 10 years, no doctor in this category has received the specialty rating to which he is entitled, despite the fact that the relevant applications have been duly submitted by many concerned parties. A spokesman for the rural doctors maintains that "the delay in the implementation of this law is due to actions of individuals who occupy high positions in the medical community."

The heart surgery units in Tripolis and the intensive care units in Argos continue to be unutilized, although they are fully equipped and are able to furnish very valuable services to patients in the provinces. This charge is framed by the medical community of the Peloponnisos. It is said in elucidation that the heart surgery unit of Tripolis has been installed in a modern building, the two upper floors of which continue to be used as storerooms, while the mechanical equipment is to be found locked up in the basement of the building.

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CSO: 4808

GREECE

DECONTAMINATION SEEN NO HINDRANCE TO MENINGITIS IN SCHOOLS

Athens TO VIMA in Greek 18 Apr 78 p 11

[Text] Decontamination of those schools in which cases of meningitis appear is scientifically outdated and useless, because the meningococcus does not survive on the walls, the floors, and the classroom benches of the schools. Thus, the closing of schools in such cases is unwarranted and merely harmful to the students.

This scientific position which has been taken by the Supreme Health Council [AYS] was reiterated yesterday by Minister of Public Services Sp. Doxiadis on the occasion of the protests and the sensations which have been caused recently by isolated cases of meningitis in Attiki schools.

The AYS is assuring the parents and the general public that according to the statistical data, a second case of meningitis has never appeared in the same school--something which proves correct the scientific point of view that decontaminations are not good for anything, and that the students of the school in which a case of this illness has appeared are not endangered by continuing in a normal manner with their studies.

The AYS also states that it does not recommend the preventive administration of medicines to the fellow students of the child who has come down with meningitis. Only adults in the near environment of the sick child can make use of protective treatment with the antibiotic quinocycline.

Through the interruption of classes and by way of more extensive contacts between the students and adults, the danger increases of being infected by this disease, because among adults are to be found a larger number of healthy carriers of the meningitis germ.

For all these reasons, the ministry will not under any circumstances permit the suspension of classes and the decontamination of the schools. As long as the children are being well fed, are getting rest, and are observing the requirements of personal health and cleanliness in their homes, they can comfortably continue their classes and engage in their gymnastics activities.

Meningitis is an infectious disease which seasonally appears throughout the world in wintertime, and even to preventively stop it as was done with poliomyelitis...[line omitted in text].

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# ALARM OVER PNEUMONIA OUTBREAK

Hong Kong SOUTH CHINA MORNING POST in English 16 Jun 78 p 1

[Article by Judy Walker]

[Text] An outbreak of viral pneumonia, which is striking young children in particular, is sweeping Hongkong.

Antibiotics are not effective against the disease which can be very dangerous and in some cases can kill rapidly.

The symptoms of viral pneumonia, which is an infection of the lungs, are a cough, high fever and shortness of breath. The disease is particularly severe in very young children and the old.

Although doctors have had cases from Stanley, Pokfulam, the Mid-Levels and Repulse Bay, and the United Christian Hospital in Kowloon has admitted six-month-old babies suffering from the disease, the Medical and Health Department has issued no warning about the outbreak.

A doctor in Central, who specialises in child care, said he has recently treated 30 children and two adults suffering from viral pneumonia.

He added that the disease is all over the Colony. The children he had treated were quite ill for five to six days and the adults very ill.

Some have had to be admitted to hospital.

The doctor said: "It has been spreading quickly through schools and, in addition, pre-school children have come down with it."

"It is very worrying for parents and at the beginning it

was for doctors, too. We did not know how serious the strain was."

Patients with the disease are told to rest, keep cool and to take aspirin for the discomfort. Some need oxygen.

A paediatrician at the United Christian Hospital said she has been a lot of cases of viral pneumonia during the past two months. Patients ranged from six months to eight or nine years old.

She described them as "quite serious" and said some were "very ill."

She agreed that antibiotics

are not effective against the disease but are given anyway to prevent extra infection from bacteria," she said.

"We did not have any warning about the disease but noticed an increase of it here and heard that other hospitals in Hongkong were experiencing the same thing."

The doctor pointed out that viral pneumonia can be very dangerous and in some instances causes rapid death.

"We do not know where the virus comes from," she said. "All diseases have a different pattern. Flu is not there all the time but certain years there is more of it than others. Once viral pneumonia starts it spreads."

There are also reports of pupils at Glenealy Junior

School and Causeway Bay Junior School being struck by the disease and that on one night alone more than 14 children with the symptoms - which resemble those of acute asthma - were taken to Princess Margaret Hospital in Kowloon as emergency cases.

But last night the Medical and Health Department said it has no indication there is an outbreak of viral pneumonia.

A spokesman added: "Maybe there is an isolated case or two. But viral pneumonia is not a notifiable disease and we do not have any statistics on it."

The Senior Medical and Health Officer, Epidemics and Statistics, Dr H. K. Chow, said: "It is up to doctors to inform us about something like this."

"But even if it is true there is not much we can do to prevent it. It is just like other pneumonia and not quarantinable."

Asked whether a warning to parents and doctors about the disease and its symptoms would be a good idea, Dr Chow replied: "I personally feel such a warning would give rise to alarm. And I would need to know the full facts before I put out a statement."

The doctor in Central expressed surprise that the department is not aware of the outbreak.



## HEALTH MINISTRY CLAIMS DECLINE IN MALARIA

Calcutta THE SUNDAY STATESMAN in English 11 Jun 78 p 7

[Text]

NEW DELHI, June 10.—The Ministry of Health and Family Welfare has said that the decline of malaria, from 6.4 million cases in 1976 to 5 million, is the result of the "modified plan of operations" for controlling the disease, started in April, 1977.

A Ministry Press Note quotes a recent World Health Organization report to prove that in contrast to India, malaria has increased in several developing countries. In 62, of the 107 countries in which the disease is prevalent, the anopheles mosquitoes have become immune to insecticides.

From 75 million cases, nearly 800,000 of them fatal, in the early '50s, malaria was virtually eradicated in this country by 1965 by a foreign-aided programme.

With the end of the aid programme, which was part of the U.S. PL-480 plan, the disease returned and an increase in the number of cases was registered as early as 1966.

The "modified plan" seeks to control the disease rather than eradicate it. The plan includes spraying and implementing other preventive measures in highly endemic areas together with giving anti-malarial drugs to the ill.

About 15,000 tonnes of DDT, 34,000 tonnes of BHC and 4,500 tonnes of malathion, 1,400 million tablets of chloroquine and 200 million tablets of primaquine are provided annually to the States by the Centre under the plan, claimed to be one of the world's largest public health programmes. About 200,000 community drug distribution and treatment centres have been set up in the country.

An intensive campaign, in collaboration with the WHO, has been started in the north-eastern States to check the spread of the falciparum malarial parasite. The Ministry has taken up research, in collaboration with the Indian Council of Medical Research, on improving methods of control.

In New Delhi, however, there has been an increase in cases of malaria over the last year following heavy rains, floods and insanitary conditions caused by the growth of the city.

## DRUG RESISTANCE IN MALARIA PARASITE CAUSING CONCERN

Calcutta THE STATESMAN in English 9 Jun 78 p 9

[Text]

Public health authorities in West Bengal are worried because it has been noticed that aminoquinoline is no longer effective in curing malignant cases of malaria. It is believed that the parasite falciparum, responsible for causing this type of malaria, had developed resistance to the drug.

Fortunately, however, malignant malaria is still fairly uncommon. Only about 10% of the malarial attacks are malignant. Ninety per cent of the cases are curable within a week.

According to Dr A. B. Chowdhury, Director of the School of Tropical Medicine, malignant malaria is prevalent mostly in the north-eastern region. Since aminoquinoline was no longer proving efficacious the public health authorities were considering treating this disease with a combination of medicines, including sulpha drugs. But, he said, this was not without danger because the sulpha drugs could produce unpleasant side-effects and could also lead to the emergence of bacteria resistant to such drugs.

Dr Chowdhury said that the attempt to produce anti-malaria vaccine had not yet proved successful. It had also become clear that vaccination against one variant of the disease would not be a safeguard against the others.

## MULTIPLE RESISTANCE

The latest researches have shown that about 108 species of mosquito and other disease-carrying insects had begun to develop "resistance" against DDT within two years of its introduction in the 1930s. Some of these insects have now developed "multiple resistance" against both DDT and other insecticides. It is believed that the extensive use of pesticides to boost agricultural production in the last two decades had caused many types of insects to develop such resistance.

INDIA

BRIEFS

BRAIN FEVER DEATHS--Tiruchi--Three fatal cases of brain fever among children have been reported, one each from Michaelnaickenpatti and Talaimalaipatti in Musiri taluk and Balakrishnampatti in Perambalur taluk. This was disclosed by Mr K. M. Kathamuthu and Mr S. V. Ramaswamy, MLAs, at the District Development Council (North) meeting held here today with Mr P. Shankar, Collector, in the chair. Confirming the deaths, the District Medical Officer and the District Health Officer said two children died in hospital while the third died in the village itself. Mr Kathamuthu regretted that Elurpatti village and the hamlets around, which have a total population of about 10,000 have no medical facilities, not even a rural dispensary. For any medical help people have to trek nearly eight kms. [Text] [Madras THE HINDU in English 18 Jun 78 p 1]

CHOLERA IN MADHYA PRADESH--In Madhya Pradesh, 13 persons have died of cholera in Dewas District. The entire district has been declared cholera-affected, and mass inoculation and purification of all water resources has been undertaken. [Text] [Delhi Domestic Service in English 0240 GMT 7 Jun 78 BK]

KENYA

## CHOLERA PREVENTION MEASURES

Nairobi DAILY NATION in English 9 May 78 p 10

[Text]

THE selling of food in open places, including school compounds, has been banned by Mombasa Municipal Commission in new anti-cholera measures.

Municipal Medical Officer of Health Dr. A. W. Mugenya advised people, including children, not to buy food sold in various places, including schools.

"It has been noticed recently that since the opening of schools, school children form a good proportion of the buyers.

"We appeal to the parents to advise their children to refrain from buying such foods."

The foods banned include ice-lollies, sweetmeats, bhajia, pancakes, cooked peas, fried potatoes and cassava, fried groundnuts and raw mangoes.

Dr. Mugenya said: "The Public Health Department is also aware that some food-hawkers operate their kiosks at odd hours when no council officers are on duty.

"All such food-hawkers, unless cleared by the department, should cease forthwith as they face prosecution if caught.

"The police have been requested to assist in the exercise".

Dr. Mugenya advised any member of the public who knew of any place where food was sold under unsanitary conditions to get in touch with his department.

"Nearly all bars have been stopped from roasting meat and selling salads unless they get clearance from the Public Health Department," he said.

"The condition required is that they must have running water both hot and cold all the time."

CSO: 5400

## PRIMARY HEALTH CARE PLAN FOR UNDERSERVED RURAL AREAS

Kuala Lumpur NEW STRAITS TIMES in English 4 May 78 p 7

[Text]

**KUALA LUMPUR, Wed.** — The Government will conduct detailed studies to find out the medical needs of the people in remote areas, the Director-General of Health, Dr. Raja Ahmad Noordin, said today.

"This is to enable the Health Ministry to plan its future expansion programmes because the needs of one district might be very different to that of another," he said.

In an interview, Dr. Raja Noordin said the implementation of health facilities in rural areas was working very well, due largely to the mobile clinics.

Dr. Raja Noordin, who is also the joint chairman of the organising committee of the National Workshop on Community Health Movement being held here, said mobile clinics could visit a village only once a fortnight.

#### Mobile teams

The Ministry was therefore trying to get the people to improve their health with the assistance of the mobile teams.

Dr. Raja Noordin said the aim of the workshop was to plan a primary health care approach with a view to improving the health status in the under-served areas in Peninsular Malaysia.

It was doing this in three stages — identifying the under-served areas, identifying the resources in those areas which could be utilised and have village level consultation on how primary health care should be organised.

Recently, a survey of under-served areas in 47 districts in Peninsular Malaysia identified 2,315 villages comprising 12 per cent of the population surveyed as under-served by health facilities.

A total of 9,582 villages with a population of 3,799,733 were covered.

With this finding it was estimated that total coverage with permanent health infrastructure could be achieved much earlier than expected, probably around 1985 to 1987.

Dr. Raja Noordin said in implementing its primary health care plan, the Government was going to increase its mobile health teams and by 1981 the entire country would be provided with primary health care.

"But this is only a stop-gap measure until more permanent health facilities are introduced which would be done under the Fourth Malaysia Plan," he added.

## MOZAMBIQUE

### EXPANDED VACCINATION PROGRAM EXPLAINED

Maputo NOTICIAS in Portuguese 17 Jan 78 p 4

[Text] The concept of the expanded vaccination program can be regarded as a new thing, not only where our country is concerned but even on the world level, since it emerged in 1974 at the General Assembly of the WHO [World Health Organization].

Until then, health care was in the hands of private bodies in the various countries or regional bodies. Within the WHO itself, there were also bodies concerned with treating and vaccinating individuals, but they also functioned separately from the others.

And so the expanded vaccination program emerged as a measure designed to put an end to this type of work, an end which also fits in with another WHO policy, involving the so-called primary health care.

It was because a great disparity was found in health methods and coverage, both within countries and among the various nations, that the WHO adopted the primary health care policy, involving an effort to cover the maximal world population with a minimum of health care in speedy fashion.

In Mozambique, on the other hand, the expanded vaccination program is one of the means of implementing the slogan "Health for All by the Year 2000," proclaimed by the WHO.

As everyone knows, our heritage from the Portuguese colonial era was a serious lag in many sectors of our life. The health sector, and more specifically preventive medicine, did not escape this heritage from the colonial days. Thus in order for Mozambique to implement the WHO slogan (and we all hope that this will happen), it will be necessary to extend health care to all settlements, especially those in the rural zones. "Each and every health technician, when he is at work in any health unit, must devote concern to working for the success of this program," the officials of the DNMP [National Preventive Medicine Office] have said.

Within this context, the DNMP has set as its goal the achievement of the short- and long-term measures of the expanded vaccination program.

Since it was possible through the national vaccination campaign covering a large portion of the population to recover the time lost during the colonial era, and in view of the consequent need to consolidate this triumph further, the officials of the DNMP decided to attempt in the short run, i.e. by 31 December of this year, to provide coverage for the five provinces already included in the national vaccination campaign.

Thus the expanded vaccination program will in its first phase cover the provinces of Cabo Delgado (with an estimated population of 899,900 inhabitants); Niassa (451,200 inhabitants); Tete (787,800); Nampula (2,075,000); and Zambezia (2,417,000).

Again in the short run, 80 percent of the children under five years of age will be inoculated against diphtheria, whooping cough, tetanus and poliomyelitis. Also, 80 percent of the children born since the national vaccination campaign will be inoculated against tuberculosis and measles.

It is hoped that 80 percent of the pregnant women can, again in the short run, be given anti-tetanus vaccine, along with 80 percent of the children of school age.

Anti-tetanus vaccine will also be given to the workers who are most exposed to the risk of tetanus, for example farmworkers.

Only 20 percent of the population in the provinces in which the national vaccination campaign has yet to be carried out will be given BCG vaccine against tuberculosis.

In the long run, the goal to be achieved is the extension of the expanded vaccination program to all of the rest of the country, such as to ensure a considerable reduction in the incidence of illness, death and disability.

5157

CSO: 5400

MOZAMBIQUE

VACCINATION PROGRAM CARRIED OUT IN GAZA

Maputo NOTICIAS in Portuguese 17 Jun 78 p 5

[Text] Gaza, 16 June--With the vaccination of 475 persons day before yesterday, the number of individuals vaccinated in the district of Manjacaze, province of Gaza, during the national vaccination campaign rose to 156,134.

The Ministry of Health team began its work yesterday in the district of Chibuto, although some of the members were left in Manjacaze to vaccinate any persons who may not have been reached during the campaign.

It should be stressed that this campaign began in June of 1976 and is designed to reduce the high incidence of diseases such as smallpox, measles and tuberculosis existing in our country. The enthusiastic popular response and the work done by the brigades have been positive factors and will allow the campaign to be finished before next year, in advance of the schedule as initially planned.

5157

CSO: 5400



## MOZAMBIQUE

### ACTIVITIES OF PANDA CLINIC DESCRIBED

Maputo NOTICIAS in Portuguese 21 May 78 p 4

[Text] Two thousand four hundred eighty patients were treated at the Panda health clinic in the province of Inhambane in the first quarter of this year. The majority of the persons examined there were suffering from parasitosis and malaria. In addition to these diseases, patients were also treated for tuberculosis and rheumatism.

In fulfillment of the guidelines set forth at the third session of the Provincial Health Coordination Council in the health education sector, the workers at the Panda clinic gave instruction in this field to the people prior to the examination.

Again in that district, the maternity department provided 100 pregnant women with care during the first quarter, and 92 births were recorded during the same period.

5157

CSO: 5400

MOZAMBIQUE

VACCINATION CAMPAIGN PURSUED IN MANICA

Maputo NOTICIAS in Portuguese 29 May 78 p 4

[Text] The head of the provincial preventive medical service reported on a Radio Mozambique broadcast that 156,289 persons were vaccinated against tetanus, measles and tuberculosis in the district of Manica, in the province of the same name.

That official stated that the campaign began last December and that currently the vaccination team is working in the Mossurize district.

Speaking of the difficulties encountered, the official said that some settlements in the Guro and Manica districts could not be reached during the campaign for lack of transportation and because some roads were impassable.

In conclusion, he spoke of the enthusiastic participation of the population in the rural sector.

5157

CSO: 5400

## MOZAMBIQUE

### VACCINATION TEAM PROCEEDS TO CHIBUTO

Maputo NOTICIAS in Portuguese 16 Jun 78 p 4

[Text] Manjacaze, 15 June (AIM)--One of the Ministry of Health teams working in the province of Gaza vaccinated 475 persons in the district of Manjacaze today, increasing the number of inoculations given in this district since 30 May to 156,134.

The team will begin its work in the district of Chibuto tomorrow. Meanwhile, some members of the team were assigned to remain in Manjacaze to vaccinate those individuals not yet reached.

This activity is a part of the national vaccination campaign which was begun in June of 1976 and is designed to reduce the high incidence of such illnesses as smallpox, tuberculosis and measles existing in the country.

According to the original plan, the campaign was to be completed by October 1979, but in view of the enthusiastic response of the people and the excellent work done, it is believed that it can be concluded before this year ends.

In September of last year, the total number of persons reached by the campaign already exceeded 4,000,000.

The campaign is designed to vaccinate the entire population of the country against smallpox, all of the children between 6 and 15 years of age against tuberculosis, and children between 6 months and 3 years of age against measles.

As of last September, the teams had already completed their work in the provinces of Cabo Delgado, Niassa and Tete, and were working in Nampula, Sofala and Zambezia.

At the beginning of this year, the vaccination program was expanded and now includes the systematic administration of vaccine against poliomyelitis and the "triple vaccine" against whooping cough, diphtheria and tetanus.

NIGERIA

LEPROSY CASES INCREASE IN ANAMBRA

Ikeja THE PUNCH in English 17 Jun 78 p 14

[Article by Cyril Mbah]

[Text] Leprosy patients have increased at an alarming rate in Anambra State since the past two years.

Statistics from the State Ministry of Health revealed that in 1976, only 324 cases were officially recorded by the ministry while more than 950 leprosy patients are at present in the State.

Investigations revealed that dispensaries and hospitals in the State were ill-equipped to handle leprosy cases and the only leprosy settlement centre lacked vaccines to cope with the over-whelming cases. It was further gathered that leprosy clinics which were previously run by missionaries were shut down soon after the government take-over of schools.

Official sources disclosed that matters have been made worse as health officials were often attacked by the patients, now roaming the streets.

A medical practitioner and a traditional ruler in one of the towns where the defunct leprosy clinics was located, Chief Albert Ikpenwa, said that leprosy could be wiped out of the country if serious campaigns were mounted against the disease.

"I am optimistic than ten years would be too long for the disease when we face it with every seriousness; by equipping dispensaries and hospitals with anti-leprosy vaccines and educating the masses on the possibility of curing a patient completely," he declared.

The State Chief Health Officer, Dr. C. Ozo, in an interview on Wednesday said that efforts were being made to rehabilitate all leprosy patients and other destitutes in the State.

## TRAINING PROGRAM FOR RURAL HEALTH WORKERS

Kuala Lumpur BUSINESS TIMES in English 2 May 78 p 11

[Article by J.F. McCallister in Tacloban City]

[Text]

IN CHINA, they're called "barefoot doctors" — people with very simple medical training who can bring basic health care to the rural millions deprived access to that rare commodity of a fully trained doctor.

But China isn't the only developing country with a large rural population and a shortage of MD's. Almost every Asian nation, in fact, must find a way to upgrade rural health without relying on doctors, and many have looked to the Chinese model as the answer to their own ailing rural health delivery systems.

One country starting to build a barefoot doctor system is the Philippines, and the centre of the country's activity in this field is located in a small, two-classroom concrete building overlooking the Pacific Ocean in this sleepy, picturesque provincial capital of Leyte in eastern Visayas. Tacloban City houses the Institute of Health Sciences (IHS), an arm of the University of the Philippines' Manila-based College of Medicine; it was established in 1976 to develop

and test a medical curriculum for rural health workers — from an 11-week course for "barangay" (village) health workers to a six-year course for MD, with midwifery, nursing, and Bachelor of Science in Rural Medicine in between.

### Committed

Staffed by bright, young doctors and administrators deeply committed to improving the health of the roughly 75 per cent of their fellow citizens who live in the countryside, IHS has already graduated 168 midwives and is currently training 49 nurses. It hopes to offer its full curriculum, from barangay health worker to MD, by 1980. And it also hopes to offer itself as a fully working model for reduplication elsewhere in the Philippines by that year so that the country can start to deploy the thousands of rural health workers it needs.

Though Filipino doctors are considered among Asia's best, the Philippines needs an institution like IHS to develop specialised skills needed for rural health care. The country's best medical schools gear their

students towards lucrative employment in fancy hospitals that can be found only in big cities or abroad. After investing so much money and time in their own educations, going to school in culturally stimulating big cities, and being trained on the most modern equipment, few doctors volunteer to work in poor, ill-equipped provincial hospitals. Only 2 to 5 per cent of the University of the Philippines (UP) graduating doctors ever take up practice in rural areas, say IHS staffers, frustrating the growth of high-quality medical care outside the cities.

To redress this medical brain drain, IHS was conceived by a group of UP faculty members in Manila and born hurriedly when Daniel Romualdez, Governor of Leyte province and brother of the First Lady, Mrs Imelda Marcos, decided to give his sister a functional birthday present and offered UP a building and some financial support for IHS in Tacloban City. IHS has made "service to community" its central creed. Its students come from specially depressed, isolated barangays unserved by

other health workers, and the barangays themselves choose the students they wish to send. Usually the students, though intelligent, are not the barangay's most gifted in traditional classroom studies, but those whom the townspeople believe will actually return to serve the community. All the students' expenses — food, lodging, books, tuition — are paid by IHS. The student, sign no service contract, but in return for their free education they are expected to return to their barangays instead of heading off for the bright lights and higher wages of Manila or abroad.

"Traditional medical schools look at education as a product to sell to students, a product the students buy to advance themselves personally," says Dr Quasi Romualdez, who chairs the research and development segment of the Institute's Manila-based oversight committee. "But IHS is trying to make the community the market, selling trained personnel to a community desiring advancement

in health care. Even if only 60 or 70 per cent of our graduates return to practice in their barangays, that will be an improvement of 30 times over my UP med school class."

IHS is likely to succeed in keeping its students "down on the farm." Says Fely Marilyn Elegado, executive secretary of the Manila oversight committee and a frequent visitor to Tacloban: "We've built into the curriculum a commitment to serve."

### Decisions

Part of the "built-in commitment" is the actual content of the courses, which are explicitly designed for a rural environment. They train the students to make emergency decisions without the immediate backup of a hospital and acquaint them in detail with the special health problems of rural areas. The courses also stress community organisation and public health as much as anatomy, since poor sanitation and nutrition are at the root of many rural illnesses.

The IHS curriculum is built in a "ladder," so that a midwife graduate is prepared for the nursing course, a nursing

graduate for a Bachelor of Science in Rural Medicine, and so on. Once the MD curriculum starts operating, a talented barangay worker could conceivably climb all the way to doctor, nine years later.

But the IHS faculty requires that students climbing the ladder return home for practical field work between each rung, insuring that they keep in touch with their community's problems, promote community appreciation for their new skills, and feel "at home" enough to return after study. A doctor graduating from the IHS six-year MD course will have spent fully three years in the field.

### Misfits

In fact, the IHS curriculum is so rural-oriented that its graduates "would be misfits in a Manila hospital," says Executive Secretary Elegado. This has posed a problem for the students, as the law requires them to take midwifery and nursing board exams that stress skills

needed in urban hospitals. The Manila oversight committee is trying to get the board exam changed for IHS students, but in the meantime they have to learn "urban medicine" well enough to convince IHS detractors that the Institute can take relatively uneducated barrio folks and turn them into competent professionals.

IHS is so determined to keep its students aimed at returning to their villages that it is even trying to move from its present home in the centre of Tacloban City to a rural campus of nipa huts. Says Dr Ed Gonzales, Faculty Coordinator: "We want to create a counterculture, making country life more attractive than city life. Instead of binding legal contracts, we want to use cultural constraints so that the students will want to stay in their communities."

Headed by Dr Amparo Banzon, who doubles as the Department of Health's Regional Director, IHS is a cooperative venture between the University of the Philippines, the Department of Health, and the Department of Local Government and Community Development. Its 21-

member oversight committee is run from the Manila office of Dr Horacio Estrada, of the UP College of Medicine, but as the Institute matures, more decision-making autonomy is being ceded to the 12 full-time and 31 part-time faculty members who work in Tacloban. "Our goal is to es-

tablish it as an independent unit of the University, once it sets up its full curriculum," says oversight committee member Dr Quasi Romualdez.

Most of the full-time faculty members and administrators are in their late 20s to mid-30s, products of UP in Manila before martial law, when the campus was a hotbed of student activism. They, like many of their contemporaries, imbued from the politically charged atmosphere of the University a deep commitment to helping the development of their country and a faith in community organisation and the common sense of the masses.

"We're trying to prove here that we can train students to be excellent health workers

even if their formal education has been substandard," says Executive Secretary Elegado. "They have trouble with English textbooks and writing reports, but their native intelligence, strength of character and simplicity of lifestyle are really humbling and more relevant to the needs of the rural majority than the abstractions of Manila-trained intellectuals."

### Budget

The institute is spending P600,000 (US\$78,000), two-thirds from UP and one-third from private foundations. The budget should reach around one million pesos (US\$130,000) when the full curriculum starts operating. Private foundations have been so impressed by IHS's work that they want to give it more money. But the faculty is reluctant to make the institute too lavish, fearing that other provinces will not be able to reduplicate an expensive programme.

So IHS has channelled extra funds into an ambitious research and development (R & D) programme that examines both the basic health problems of rural people

in the Philippines and the skills required by IHS trainees to solve those problems. "We monitor community needs so they can be fed into our academic programme," says R & D Coordinator Dr Estralla Gonzaga. "And we just administered a battery of questionnaires to our first batch of midwife graduates sent into the field, to see what they thought of their academic preparation." The students said they were frustrated because they were powerless to alleviate the poverty that caused so many of the health problems in their communities. They also reported readjustment problems — even though their stay in Tacloban for the midwifery course was only 18 months.

### Encouraged

But overall they were encouraged. Some set up health brigades and others motivated their fellow citizens to build water-sealed toilets, in addition to treating minor cases, delivering babies, and giving routine injections. Said one student from the island of Samar: "It's just a start, but we know we're helping."

Most of the students are under twenty, with three times more women than men. The first batches of midwives were recruited by telling them that they would be able to climb the ladder to become doctors — but IHS found that some were not suited for further study. And IHS needs to deploy midwives and nurses in the field to see if the curriculum works.

The students knocked off the ladder were disappointed. Some will return for further study later. The faculty is thinking of accepting only much older students, those already settled down with families, who will be content to take a midwifery course alone without viewing it as a passport to more advanced education.

### Hurdles

IHS has other hurdles besides choosing the correct composition of its student body. Its first crop of midwife students must pass the board exams in May with flying colours, though most did very poorly on the National College Entrance Exam. It must build an integrated system of health care on a scale never before attempted in the Philippines, so that everyone from barangay health worker to doctor knows where he or she fits in. It must convince tradition-minded rural folks that barangay health workers and midwives are competent professionals who can treat most ailments, leaving doctors for rarer or more complicated illnesses.

But the biggest hurdle IHS must jump is that no one, really, knows if it will work or continue to exist. The programme is too ambitious for anyone to be sure about its future. Says Executive Secretary Elegado: "We're all taking chances with our careers, and we all know it — that's why we work so hard. But none of us want just a comfortable bureaucratic job. We have a chance here to make medicine responsive and relevant to the needs of our people. There's no reason for us to continue if we're no different from medical schools in Manila." — Depthnews.

PHILIPPINES

CHOLERA REAPPEARS IN MANILA, ANTI-CHOLERA SHOTS REQUIRED

Hong Kong AFP in English 1234 GMT 11 Jul 78 OW

[Text] Manila, 11 Jul (AFP)--Cholera El Tor, which disappeared from metropolitan Manila nine months ago, has returned to the Philippine capital, the health department announced today.

Deputy Health Minister Jesus Azurin said 14 El Tor (Asian cholera) patients were admitted to the government hospital during a two-week period ending last July 1 prompting the Geneva-based World Health Organization to lift an earlier international advisory declaring Manila as a cholera-free area.

Mr Azurin attributed the resurgence of the contagious disease to the alleged failure of city slum-dwellers to observe hygiene.

The last time El Tor was reported in the capital was in October last year when three cases were reported.

With the lifting of the WHO advisory, Mr Azurin said, travellers bound for Manila, whether by ship or aircraft, are required again to have anticholera shots in their countries of origin.

Similarly, passengers leaving Manila must have vaccinations before boarding their aircraft or ships.

Except for metro Manila, no other area in the Philippines has reported any new cholera outbreak, Mr Azurin said.

CSO: 5400



SYRIA

BRIEFS

HEALTH MEASURES AGAINST CHOLERA--Damascus, 12 Jun--Dr Madani Khiyami, minister of health, issued a communique today on imposing health controls at border posts, airports and ports so as to insure that those arriving in Syria from countries where cholera is suspected are free of the disease. This is aimed at preventing incidence of cholera in Syria. The ministry has taken measures to set up the necessary health centers at entry points. These centers will perform tests on those arriving in the country and will also conduct checks of hygiene. The ministry has also issued the instructions required to operate these centers round the clock and to provide them with technical teams and the necessary equipment to insure that the health controls are performed. [Text] [Damascus SANA in Arabic 1400 GMT 12 Jun 78 JN]

CSO: 5400

MINISTER REPORTS ON INCIDENCE OF CHOLERA, ONOCHECERIASIS

Nairobi DAILY NATION in English 27 Jun 78 p 20

[Text]

SOME 600 people have died and 10,266 others treated since an outbreak of cholera was reported in Tanzania last October.

The country's Health Minister, Dr. Leader Stirling, told Parliament the situation was "not yet good" because cases of cholera continued to be reported from Kigoma, Tanga, Kilimanjaro and Morogoro regions.

In other regions, however, there was no threat of cholera, he said. The Minister blamed the spread of the epidemic on ignorance about proper hygiene.

Dr. Stirling, who was presenting his Ministry's estimates for 1978-79, told the House that quarantine measures imposed in the cholera-hit zones were not being observed. "To cap it all," he said, "most of our surroundings are very bad indeed."

According to the Minister, cholera was first reported in 1974 in Tanzania's Kyela District, but it was controlled quickly enough. Only four deaths were reported then.

Urging MPs to help in the cholera eradication campaign, Dr. Stirling said the situation "could be bad if the disease is not wiped out in time" because, he said, not only the lives of people would be in danger "but even the country's economy can be greatly strained".

He said, too, that there had been an increased incidence of cases of blindness in Tanzania. "The disease threatens about 500,000 people. Already 25,000 people have lost their sight," he said.

Dr. Stirling, the only White Minister in the Tanzanian government, warned of the increase of the disease (*Onochecheriasis*) and called for urgent measures to contain it.

CSO: 4420

FRESH OUTBREAK OF CHOLERA REPORTED IN FOUR REGIONS

Nairobi DAILY NATION in English 16 Jun 78 p 36

[Text]

A CHOLERA epidemic has been reported in several areas of mainland Tanzania and health officials are busy trying to ensure the disease does not move across to neighbouring countries.

According to reports from West Lake Region, tough measures have been taken on at all border points and movements of people across the borders is being restricted.

All travellers to and from Furundi, Rwanda, Zaire and Zambia will be required to show evidence of inoculation against cholera.

Fresh outbreaks of cholera have been confirmed in Dodoma, Kiron-gwe, Morogoro and Kigoma regions where some villages have been put under quarantine.

In Kigoma, the entire Luiche River Basin has been declared under quarantine. All peasants have been ordered to evacuate the area.

Luiche Basin —the most fertile area for rice, maize, banana and palm trees — is suspected as the

base of the present outbreak.

The peasants will not be allowed to go back there until medical experts are satisfied that the area is safe.

According to reports, seven people have died and 90 others are being treated in different hospitals.

Medical authorities in Dodoma have taken extra precaution after the country's Central Mental Hospital in the town had been hit by cholera and eight deaths were reported. Eleven other patients were quarantined for treatment. It was confirmed that the disease was brought to the Mirembe Mental Hospital by a patient from Kigoma.

At least four villages — including the Kilombero Basin — have been hit by the fresh outbreak. Medical experts have been sent out to the affected areas to assess the situation.

CSO: 4420

FOUR ADDITIONAL CHOLERA DEATHS ANNOUNCED

Nairobi SUNDAY NATION in English 14 May 78 p 3

[Text]

FOUR more people have died of cholera in less than 24 hours in Tanzanian Region of Kigoma bringing the total deaths to 37 in the past four days while 55 more others have been admitted in different hospitals in the country.

Reports from the regions said twenty-three people had been admitted in Arusha, 15 in Kilimanjaro and five in Tanga in the past two days.

Kigoma Regional authorities have appealed to cell leaders to ensure that no one enters or leaves the seven affected areas. Trains passing through Kigoma will not stop there till further notice. Also boat services for passengers along Lake Tanganyika have been suspended.

Cholera epidemic has claimed more than 400 lives in Tanzania

according to the figures recently released by the government. But observers and foreign news agencies feel the figure could be ten times that since the killer disease broke in the country seven months ago.

According to Kigoma Regional Medical Officer, Mr. J. B. Singano, the number of cholera cases was still increasing in the region.

The killer disease completed its circle in Tanzania last Monday when it spread to Kigoma.

Seven villages, Mwakizega, Kaseke, Nyamoli, Mgaraganza, Mgambo, Mtanga, and Mtale have so far been affected by the disease since last Monday.

Kigoma Regional authorities last night expressed their fear for the shortage of anti-cholera drugs in the region and appealed to authorities concerned to ensure that the drugs were provided before it is too late.

CSO: 4420

## TURKEY

### DOCTOR DISCUSSES BATTLE AGAINST MALARIA

Istanbul TERCUMAN in Turkish 7 Jun 78 p 2

[Article by Dr Izzet Niyazi Arkan in the "Ideas, Views, Opinions" column: "Malaria and the Fight Against Malaria"]

[Text] Malaria has long been endemic to Turkey, but in recent years, just when we thought it was becoming something of the past, it reappeared in the Cukurova region and has been spreading ever since.

During the years after the War of Independence, 13 million Turks, already worn out by the war, had to battle against the scourge of malaria also. Working in the fields, or at one's trade became impossible. Close to 2 million people out of a population of 13 million had malaria.

Dr Refik Saydam, the minister of health in those years, initiated a nationwide battle against malaria. In 1925, a special legislation was passed--Law 839--and the Malaria Control Organization was formed. The crusade began in Adana and Aydin regions which, at the time, were Turkey's worst infected areas. From then on, every year, other malaria-infected regions of the country were included in the battle area.

The nationwide war against malaria was waged with the efficiently prepared Malaria Control Law. Malaria control teams spread to the countryside. Health personnel--medical doctors and sanitarians--went to villages and stayed with the peasants. No other public organization of the Republic Era has ever been more closely involved with peasants. While people already infected were being nursed back to health, operations got underway to drain swamps and to destroy mosquitoes.

Those doggedly sustained efforts defeated malaria. The incidence rate dropped steadily, farmers began to regain their strength. Malaria-related mortality among children became scarce. The population began to grow.

In 1945, under the new Extraordinary Malaria Control Law, villages and towns, which heretofore had remained outside the battle zone, were brought into the scope of malaria control measures, chemicals and equipment were purchased for a widespread mosquito control campaign.

The battle against malaria lasted until 1955. It was a successful battle, malaria was beaten. The population soared from 13 million to 30 million. There were times when it was nearly impossible to find a malaria patient so that malaria parasites can be shown to students at medical schools. It was a success that not even the Balkan countries could match. It looked like malaria would be a disease of the past. The Malaria Control Organization pressed on with its operations nevertheless. The problem is malaria cannot be cured by a short treatment. It is a chronic disease. Malaria parasites remain alive in the human body for a stretch of 4 to 5 years. A patient may have a relapse any time. That is why, malaria patients must be kept under observance and must not be allowed to infect others--in short, malaria has to be eradicated. The eradication effort got underway in Turkey in 1960. Every patient who had a high temperature was given a blood test. If malaria showed, he was placed under treatment. We worked very hard, but we could not rid the country of malaria. In fact, it is not easy to eradicate malaria. Around 2,000 cases were reported annually. It was impossible to destroy all the anopheles--the type of mosquitos that carry the malaria parasite. In 1974, about 2,800 malaria cases were determined. There were 9,000 in 1975; 37,000 in 1976, and 120,000 in 1977.

We could not afford to waste time. The rising incidence of malaria underlined the necessity for urgent measures.

Italy also had waged a battle against malaria. Italians were so successful in their campaign that, after a period of time, they suspended their efforts in the belief that they had conquered the disease. Subsequently, however, malaria became epidemic once again and Italians embarked on another anti-malaria campaign. They went at it with a tremendously efficient and well-planned organization. They also employed some unusual methods. One, for example, was the use of bats which are known to feed on mosquitoes at night. They set up "bat-breeding sheds" at 10-kilometer intervals.\*

Swamps were drained, low-lying, sea-level land was filled, types of fish--gambusia for one--which feed on mosquitoes were bred in the nation's waters, professors, with the knowhow and the experience in malaria control, Markia, Fava, and Misiroli, among others, remained by the less experienced younger malaria fighters.

In the past 4 years in Turkey, malaria cases have tripled, quadrupled, over the previous year's. In my estimation, antimalaria measures are long overdue.

#### Measures

I will, in my capacity as a former malaria fighter, pass on to you my views and list what I believe are the measures we need. Adana--the Cukurova region--was a hotbed of malaria in 1925 when we waged our first antimalaria campaign. Cukurova is a hotbed today again.

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\*I was sent by the Ministry of Health to the Rockefeller-sponsored malaria control courses in Italy in 1933.

I would like to tell you about a historic event. Ferdinand de Lesseps, who built the Suez Canal, subsequently undertook the construction of the Panama Canal also. He had a large organization and a lot of capital. He worked hard for 20 years, but he could not build the canal. A primary obstacle was malaria. De Lesseps began work on the canal in 1881. Although the malaria parasite had been discovered a year earlier by a French military doctor, Laveran, in Algeria in a malaria-stricken soldier's blood, it was not known at the time how the disease was transmitted from one human to another. It wasn't until 1897 that scientists found out that anopheles carry the malaria parasite from a stricken person to a healthy person. In the meanwhile, numerous workers at the canal construction site, and many of the physicians who had gone there to treat them, died of the disease.

Ferdinand de Lesseps, having suffered a very heavy financial loss, gave up his efforts to build the canal. Americans took over in 1904. Americans knew that anopheles mosquitoes carried the malaria parasite from one person to another, and that this type of mosquito became active after sundown. They drained the swamps and went all out to destroy mosquitoes, but in the meanwhile, they knew they had to keep the mosquitoes from biting the workers. They found a way to protect their workers. They put screens on the windows and doors of the lodges where the workers slept at night. Workers were sent to their lodges before sundown and they stayed there until morning. The routine kept them free of malaria. The canal was finished in 1913 and inaugurated by President Wilson.

#### Rice Farming on Marshy Land

If we decide to use that model in Turkey, we should concentrate our efforts in Adana, that is, the Cukurova region.

There is a steady inflow of workers to Adana from all parts of Turkey. Workers who come from malaria-free regions get infected in Cukurova and carry the disease back home when they return.

We must build for the workers in Cukurova solid lodges with screened windows and doors, just like the ones built at the Panama Canal construction site. We must have the workers remain in those lodges at night. It is impossible to destroy all malaria-carrying mosquitoes at the Cukurova region. Italians were successful in clearing the island of Sardinia of anopheles mosquitoes. Nonetheless, it is a difficult and also expensive process. Turkey's 1928 mosquito-control drive in Istanbul was a success also. Initially, efforts were concentrated in the area between Kadikoy and Bostanci; later, the control zone was expanded to include Maltepe, Pendik, and Florya. Thanks to that campaign, places like Erenkoy and Suadiye were cleaned of mosquitoes and were able to develop into Istanbul's choice resort sectors. In 1960, however, the Ministry of Health turned the mosquito-control function over to local municipalities.

One measure that may be considered for Adana is a temporary ban in rice-farming on marshy land which is a perfect breeding ground for mosquitoes.

We observed during our malaria-control operations that in heavily infected areas the incidence rate dropped dramatically after rice farming was banned.

#### Conclusion

The fight against malaria should start in Adana. Malaria can easily spread from our country to others. We have 1 million workers in West Germany, Belgium, Netherlands, and Switzerland. Those nations are justifiably concerned over the possibility of malaria spreading to their country. That is why, Belgium contributed 3 million Turkish liras, and the World Health Organization \$2 million, to our malaria-control efforts.

An effective malaria-control program requires more than mosquito eradication measures, it needs public education. Our peasant population was largely uninformed in the twenties, but now we have many means of communication. Every village has radio and television. Information on how to eradicate malaria can be disseminated by those means. It will be of tremendous help.

7244

CSO: 5400



## URUGUAY

### BRIEFS

HYDATIDOSIS LAW PASSED--Rocha (By Jorge Mego Vique, correspondent)--The Rocha Commission for the Prevention of Hydatidosis called a press conference to release an ordinance, approved by the Neighborhood Council on 18 April 1978, instituting guidelines for controlling, limiting and owning dogs; sanitation measures; registration; affidavits; preventive measures; violations; and regulations in support of national objectives aimed at preventing hydatidosis. [Montevideo EL PAIS in Spanish 26 Jun 78 p 28]

CSO: 5400

## VIETNAM

### BRIEFS

DONG NAI ANTIMALARIA EFFORTS--Recently, the people's committee in (Phong Phu) district, Dong Nai province, together with the district public health service and mass organizations, set forth many prophylactic measures with a view to preventing and eliminating malaria in the entire district. Thanks to prompt efforts by the district public health service in spraying DDT in every house and urging local people to take antimalaria pills, all pockets of malaria in various new economic areas and in villages and hamlets in the deep forest have been stamped out. To date, some 93 percent of houses in the district have been sprayed with DDT and 95 percent of its population have been immunized against malaria. [Ho Chi Minh City Domestic Service in Vietnamese 1200 GMT 12 Jun 78 BK]

QUANG NAM-DANANG MALARIA ERADICATION--Quang Nam-Danang province recently concluded the first phase of the 1978 malaria eradication campaign in 109 villages, two new economic zones, 15 army units and various work sites, state farms, state forests, enterprises and areas affected by malaria. These areas were sprayed with DDT, 31,000 people were given antimalaria inoculations and 47,700 people were issued antimalaria medicines. [Hanoi Domestic Service in Vietnamese 1300 GMT 23 Jun 78 BK]

DIARRHEA MEDICINE--Cadres of the pharmaceutical ward in Ha Nam Ninh provincial hospital recently coordinated with the children's health protection institute to successfully produce a granulated anti-diarrhea medicine called (Palmata) using local materials. Noteworthy was that during the research process, the pharmacists of the above two units had used tannin to transform (palma-tetrachloride) into (tannatine palmitate histamine). After administering the medicine to some patients for some time, the medicine proves to be very effective and well-liked by the children. [Hanoi Domestic Service in Vietnamese 1300 GMT 16 Jun 78 BK]

CSO: 5400/4620

ZAIRE

## MEASURES ON TYPHOID VACCINATION ABUSES

### Typhoid Vaccinations Compulsory but Free

Lubumbashi MJUMBE: LE QUOTIDIEN DU SHABA in French 6-7 May 78 pp 1,6

[Text] The regional authority, which is very closely following the progress of the typhoid epidemic, especially in the sub-region of Lubumbashi, is very concerned about the situation, which is in danger of leading to calamity if the necessary attention is not paid to it.

Thus, it has noted with some indignation, first that the vaccination services responsible for this operation are requiring from the population a fee prior to vaccination; second, that certain undisciplined elements in the police services have been carrying out clandestine and unauthorized inspection of anti-typhoid vaccination certificates.

This highly anarchic and intolerable situation has resulted in the regional commissioner's taking severe measures toward facilitating the operation and making it possible for the whole population to be vaccinated against this endemic pestilence. The full text of the regional commissioner's official communique on the subject follows:

"In view of the typhoid fever reported in the city of Lubumbashi, the regional commissioner of Shaba, citizen Efambe Y'Olanga, calls upon the whole population to be compulsorily vaccinated.

Partially state controlled companies and enterprises are called upon to pay for anti-typhoid vaccine at the accounting department of the vaccination office for their employees and all members of their families.

The vaccination operation is free for all other levels of the population of Lubumbashi:

Eligible state civil servants and members of their families

Schools, institutes, and JMPR [Youth of the Popular Movement of the Revolution]

## Garrisons

The regional commissioner therefore notifies the public that during this campaign for compulsory vaccination, no fee may be exacted from the population."

### Fees Still Charged for Typhoid Vaccination

Lubumbashi MJUMBE: LE QUOTIDIEN DU SHABA in French 11 May 78 pp 1,6

[Text] The public will remember the press communication made by the regional authority regarding typhoid fever. In his statement to the population of Shaba, the regional commissioner had made it clear that vaccination against typhoid fever was not only compulsory but free as well. Clearly, vaccination could not be conditional upon the payment of any fee whatever.

It is a great disappointment to note today that at the Health Service, some officials who escape the chief physician's notice are continuing to take fees. During our round yesterday, some mothers confirmed that they have paid 120 K. Other women, who have come into our offices, have had to pay out 20 K, a sum representing the value of the certificate.

What is worse, however, is when Health Service officials take real pleasure in bouncing around the militants who come to them for vaccination. Instead of showing them the right door, they enjoy sending them on a tour of the building, directing them from door to door. What is the meaning of this? Why this impertinence?

It is up to the officials of that health service to show that they are truly responsible. This is all the more the case in that defiance of the authorities cannot continue with impunity.

12149

CSO: 5400

ZAIRE

## DETAILS ON CHOLERA OUTBREAK

### Cholera Kills Sixty-Eight

Lusaka ZAMBIA DAILY MAIL in English 16 Jun 78 p 2

**[Text]** BRUSSELS. - Sixty-eight people have died of cholera in East Zaire, a Belgian public health ministry spokesman said yesterday.

He said the disease had been contained there but people were fleeing the contaminated regions and there were fears it might reappear elsewhere.

Travellers arriving in Bujumbura, Burundi, from Zaire's Kivu Province yesterday said 300 people had died of the disease and that 300 others were in hospital.

### Cholera Epidemic in Kivu

Lusaka SUNDAY TIMES OF ZAMBIA in English 18 Jun 78 p 1

**[Text]**

A CHOLERA epidemic has broken out in the eastern province of Kivu, the Zairean news agency AZAP reported, without detailing the extent of the outbreak. It said doctors in the region met on Wednesday at Bukavu, near the border with Rwanda and Burundi, to discuss what measures to take. No cases of cholera have been reported from the Shaba province mining town of Kolwezi, but medical

authorities have ordered all dogs in the town to be shot by the army as a preventive measure, it was reported. Travellers from Bubanza province in Burundi who first reported the cholera outbreak in Zaire, said hospitals and pharmacies there had run out of medicines. At least 300 people were reported to have died in three towns alone and 300 more admitted to hospitals in Uvira, Kalemie and Bukavu. — Zana/AFP.

ZAMBIA

INVESTIGATION OF MEASLES DEATHS

Lusaka TIMES OF ZAMBIA in English 1 Jun 78 p 1

[Text] The Ministry of Health has launched intensive investigations into reports that more than 150 children brought into the country by Zambians fleeing the war-ravaged Kolwezi in Zaire's Shaba province had died of measles due to lack of drugs in Mwinilunga district.

This was revealed in Solwezi yesterday by North-Western Province permanent secretary, Mr Langston Kawesha and provincial medical officer, Dr Muhammed Ashan.

Mwinilunga East Member of Parliament Mr Rhodes Mangangu said in Lusaka on Tuesday that 300 Zambian families fled Kolwezi into Zambia and that 500 families were missing in Zaire. At least 150 children belonging to the Zambian families had died from measles and malaria due to lack of drugs, he added.

The permanent secretary and the PMO said a representative from the ministry headquarters in Lusaka and officials from Solwezi had rushed to Mwinilunga for an on-the-spot investigation into "a very serious situation".

"We are carrying out investigations into the reports and we are waiting for the assessment, Dr Ashan said.

Mr Kawesha said the deaths of children "is a very serious one and we cannot be expected to sit idle without carrying out intensive investigations to verify the reports."

CSO: 5400

ANTI-RABIES CAMPAIGN INTENSIFIED

Lusaka TIMES OF ZAMBIA in English 16 Jun 78 p 2

[Text]

A THIRD person has died in Kitwe Central Hospital after being bitten by a rabid dog in Kalulushi two months ago.

The first victim died on April 27 and the second on June 6 in a situation that has culminated into massive vaccination and shooting of stray dogs in the area since the breakout of rabies in the area.

Provincial veterinary officer for the Copperbelt, Dr Forster Mungaba who confirmed the death yesterday said the third rabies victim died last Friday.

Dr Mungaba had described the situation in Kalulushi as "very serious" when he announced the deaths of two people last week as a result of rabies outbreak there.

Dr Mungaba said a vaccination campaign has been launched and the shooting of stray dogs intensified.

He said 120 stray dogs have been shot since the imposition of dogs control in the district.

He expressed hope that the situation would be brought back to normal by next week.

The mine hospital authorities in Kalulushi have offered to treat persons bitten by dogs in the district.

Dr Mungaba has also appealed to Ndola residents to comply with the dogs control regulations as the tie-up order was still in force in the district, adding that the area was still rabies infected.

— Zana

CSO: 5400

## ZAMBIA

### BRIEFS

DENIAL OF MEASLES DEATH--The Ministry of Health has denied that at least 150 children belonging to Zambian families who fled the embattled Shaba province of Zaire had died from measles and malaria in Mwinilunga district. A ministry spokesman said in a statement yesterday that a team dispatched to the area found no evidence of the reported deaths. Early last week, Member of Parliament for Mwinilunga East which borders Shaba province, Mr Rhodes Mangangu, claimed that about 150 children who arrived in the district died. The spokesman said: "While it may be accepted that supplies are not as much as they should be, the team which visited Mwinilunga and Kanyama, two of the three main centres where refugees are gathered, found no evidence of any deaths. [Excerpt] [Lusaka SUNDAY TIMES OF ZAMBIA in English 24 Jun 78 p 1]

CSO: 5400



## INTER-AMERICAN AFFAIRS

### BRIEFS

SWINE IMPORTS FROM BRAZIL BANNED--Santa Cruz, 22 Jun--The Ministry of Agriculture, Livestock and Campesino Affairs issued a resolution temporarily prohibiting imports of hog livestock and hog byproducts from Brazil, for fear of a possible contamination of the nation's livestock with African swine fever. It also orders the Animal Health Division of the Livestock Department to adopt the strictest measures for health control and disease prevention to control the possible spread of that disease among the hogs. The Development Corporation of Santa Cruz, Beni and Pando were asked to cooperate with the health control within their jurisdictions. The civilian and military authorities on the frontier with Brazil, where there are state veterinary facilities, were also asked to cooperate in the control. The resolution states that it will cease being in effect when the authorities of the Brazilian Animal Health Department prove to the Bolivian authorities that the outbreaks of this disease have been eradicated. [Text] [La Paz EL DIARIO in Spanish 23 Jun 78 p 6 PY]

CSO: 5400

ARGENTINA

AFRICAN SWINE FEVER WORRIES LOCAL BREEDERS

Buenos Aires LA NACION in Spanish 24 Jun 78 p 1-3a

[Text] The African swine fever currently affecting Brazil has aroused some concern among our breeders, as they fear that the disease could cross the border. According to reports from that country, the authorities have taken an active part in the battle being conducted to control and eradicate the disease, which has given rise to a veritable operation of national scope.

What is certain is that the focuses [of infection] which have appeared so far have decimated the hog stocks; and although it is said that the virus does not attack man, the consumption of pork is diminishing in a country such as Brazil which uses it daily for food.

In any event, the danger is still far away; however, a number of breeders are somewhat worried and would like to be better informed about the scope of this disease and to know whether there are possibilities that it will spread to our herds.

8143

CSO: 5400

REPORTAGE ON MAHALAPYE AGRICULTURAL SHOW

Cattle Exports Down

Gaborone DAILY NEWS in English 13 Jun 78 pp 2, 3

[Text]

The Government is puzzled that the European Economic Community (EEC) has not yet started importing our beef again although there is no longer any risk of importing foot and mouth disease.

This disclosure was made by Minister of Agriculture Mr E.S. Masisi, while officially opening the Mahalapye Agricultural show over the weekend.

Meanwhile Government has decided to establish its own foot and mouth disease institute in Gaborone after discovering that the vaccine the country has been depending on has proved ineffective, further disclosed.

Despite the fact that progress in fighting the disease is promising, the European Community has not started importing

Botswana's beef, he said.

"We find this puzzling, because we understand that the countries that import meat from us are satisfied that there is no longer any risk that they will import the disease," Mr Masisi said. He added with concern, "I must say that we are greatly disappointed by this situation".

We had understood that our association with the European Community was to be a partnership, now it does not seem that the Community understands our problems".

According to the Minister the Community has the only countries that pay Botswana a reasonable price for her meat.

"I have to tell you that however successful we are in eliminating foot and mouth, it is inevita-

ble that we shall have to make further large cuts in prices for livestock if the European Community continues to refuse to let us export our beef to them", Minister Masisi said.

He added: "I can assure you that Government is leaving no diplomatic stone unturned in its efforts to get a satisfactory solution to this problem".

Concerning the proposed foot and mouth disease institute Mr Masisi said: "On 10th May the agreement was signed with the French IFFA Merrieux Company and laboratories will be flown here this month and French specialists will commence production operation immediately".

In the meantime, the Government's P50-per-beast advance scheme to make loans to cattle owners in the foot

and mouth stricken areas will start in July this year, he further disclosed. Government will also continue to waive primary school fees in the affected areas, he said.

"We hope to open the area west of the railway line on this side of the Makoba fence after a two to three month period has elapsed since the last outbreak in Makgadikgadi area, the Minister also stated.

He added, however, that the exact time depends on the outcome of negotiations with the importing countries.

Areas north of the Makoba fence will continue to suffer a complete ban on all exports to the Botswana Meat Commission (BMC) for many months, Mr Masisi said.

"I must emphasise strongly the need for continued vigilance and discipline with regard to the measures needed to control and eliminate foot and mouth disease", he said.

He explained: "The railway line fence, the fence west of Dibete, and the Makoba fence will continue to be tightly patrolled and guarded at all times"

Minister Masisi said all roads crossing these fences will have gates and every crossing point will be guarded.

"No cattle can be allowed from west to east of the railway line fence under any conditions", said Mr Masisi.

## Livestock Restrictions Hurt Show

Gaborone DAILY NEWS in English 13 Jun 78 p 2

[Article by Andrew Sesinyi]

[Text] **Participants in last weekend's Mahalapye Agricultural Show were more pre-occupied with making money than exhibition. Sixty-Seven per cent of the stalls there were either shops or bars, and of the 79 stalls constructed, 17 remained empty throughout the Show.**

**Even the 33 per cent of the stalls which had notable exhibitions lacked diversity. Small items appeared thrown haphazardly in the stalls serving as exhibits.**

**It was clear that most people participated with the sole intention of making money. In the words of an observer the show was just "an occasional market place."**

**The foot and mouth disease livestock movement restrictions hit the show badly, because cattle were not allowed into the showgrounds. The cattle on competition were several kilometres out in the outskirts of Mahalapye where their movement is restricted. Other livestock were also impeded from featuring in the show by these restrictions.**

**Restrictions were introduced after the outbreak of foot and mouth disease in the northern parts of the country, which led to the closure of Botswana Meat Commission and thus suspension of slaughtering. This put Botswana in a great economic dilemma.**

**The chairman of the show committee, Mr G. Sebeso, who is also Member of Parliament representing that constituency agreed that participants were more concerned with making money than exhibiting items. He described them as "business-minded"**

**Mr Sebeso said that the foot and mouth disease restrictions discouraged many people who could have participated in the show.**

**The turn-up appeared low although Mr Sebeso said that it was better than last year's. Only in the late Saturday afternoon when horse racing commenced were there lots of people. Until this event took place there were not more than 400 people in the show, most of whom were school children.**

**Mr Sebeso commented that the committee intends to hold horse racing on Fridays during subsequent shows because "it takes too much of our time".**

**The crowd was almost uncontrollable during horse racing and police had to be brought in to help control the situation.**

**Hennie Herbst 14, and Philemon Baloi 16, both of Mahalapye were heroes of the show after winning several races.**

**People from the neighbouring villages Shoshong, Bonwapitse, Palapye, and as far as Gaborone attended the show.**

CSO: 5400

EEC DELEGATE SAYS BEEF BOYCOTT TO CONTINUE

Gaborone DAILY NEWS in English 22 Jun 78 p 1

[Article by Andrew Sesinyi: "Beef Freeze Still on Says EEC Man"]

[Text]

**President Sir Seretse Khama and the Vice President and Minister of Finance and Development Planning Dr Q.K.J. Masire, yesterday met a delegate from the European Economic Community (EEC) amidst the uncertainty over the Community's resumption of our beef import.**

The EEC delegate to Botswana, Lesotho and Swazil and, Mr David A. Anderson in an interview before meeting the President and Vice President Dr Masire said that the Community knows that the northern part of the country is still struck by foot and mouth disease.

"What the EEC is considering is whether to import beef from disease-free areas," Mr Anderson said.

Even then, he stated, the resumption of the exports will require "a favourable opinion from the standing veterinary committee from the EEC member countries." He, however, added "it's not for me to speculate what the decision of this technical committee will be.

"However, I expect that the Commission of the EEC will be making a proposal to that committee in the not too distant future," the delegate further said.

Although he did not disclose whether or not this issue would feature in his talks with the President and Vice President, Mr Anderson said: "It's very difficult to come to Botswana and not talk about beef since beef is central to the whole economy of Botswana."

Although he stated that some EEC members who have been in the country after the outbreak of the disease were impressed with the "efficient measures" the Botswana Government took to combat it, there is still room for caution.

"An outbreak of the foot and mouth disease in Europe could be disastrous for the European farmers as well as other farmers," Mr Anderson stated.

He added: "there is an understandable anxiety and this has expressed itself by the way of the

Commission which has responsibility to European farmers wanting to be fully assured that there is no risk before they will agree to a resumption."

Further he said: I do not wish to understate the

seriousness of the present situation to the economy of Botswana but I like to think that this is a stage we all pass through."

Mr Anderson's remarks come about a week after the Minister of Agriculture Mr E.S. Masisi has disclosed that the Government is puzzled that the EEC has not yet started importing our beef again although there is no longer any risk of importing foot and mouth disease.

The outbreak of the disease last November led to the closure of the Botswana Meat Commission (BMC) and thus suspension of beef importation by the EEC.

This has put Botswana in an economic dilemma and government sources have disclosed that BMC experiences heavy losses.

Ever since the outbreak of the disease government has introduced tight restrictions on the movement of livestock and cattle inoculations have been stepped up tremendously throughout the country.

As part of the drive against the disease Government has also decided to establish its own foot and mouth disease institute in Gaborone.

Mr Anderson has stated that his mission here was to "take formal leave of the Government," since he will be resigning to take up an appointment as Assistant Secretary-General in the Commonwealth Secretariat.

CSO: 5400

MISSION SEEKS TO END EEC BOYCOTT OF BEEF SALE

Gaborone DAILY NEWS in English 23 Jun 78 p 1

[Article by Andrew Sesinyi]

[Text] **A delegation, led by the Vice President and Minister of Finance and Development Planning, Dr Q.K.J. Masire leaves Botswana on Monday to consult with all nine member countries of the European Economic Community (EEC) in a bid to ease the stalemate on our beef export.**

The delegation will later be reinforced by External Affairs Minister Archibald Mogwe in Brussels.

Minister Mogwe left yesterday for Sao Tome. Details of his mission were not disclosed. Accompanying the Vice-President will be the Minister of Agriculture Mr E.S. Masisi, Mr T.S. Madisa, Chairman of the Botswana Meat Commission, Executive Board Dr J. Falconer director of veterinary services and one official from the Ministry of Finance and Development Planning.

According to one member of the delegation Dr Falconer, the EEC countries will be alerted on the political and economic repercussions the suspension of the Community's imports of our beef have caused.

"Some of these countries have no knowledge of Botswana," said Dr Falconer who also disclosed that the delegation would fully enlighten the member states on measures adopted to combat the disease.

The delegation, according to Dr Falconer, speculates that ignorance of real facts about the situation in the country could be responsible for the stalemate.

Two countries of the EEC, Britain and France, who are the major importers of our beef are willing to import beef from the disease-free areas, said Dr Falconer. However, he added, these countries cannot take a unilateral decision. They therefore have to await the decision of the Standing Veterinary Committee of the EEC.

The silence of the EEC Standing Veterinary Committee in the beef issue has stirred considerable anxiety in Government circles. The

Government has already expressed bewilderment that the Community has not resumed beef imports despite the stepped up precautions against the foot and mouth disease.

The regional representative of the Community Mr David Anderson who met President Sir Seretse Khama and Dr Masire on Wednesday brought no new light to the worsening situation. He said: "it's not for me to speculate what the decision of this technical committee will be."

Meanwhile, the BMC Board has set producer prices for the month of July. Officials of the Board said prices for the month of July will be the same as the current ones.

Producers prices for August will be decided and announced before the end of July. This has come about as a result of the uncertainty

of the beef market.

In the past the Board had been setting prices for a period of three months in advance.

Tight restrictions have been imposed on livestock movement ever since the outbreak of the disease last November.



BOTSWANA

BRIEFS

HUNTING BAN LIFTED--The Department of Wildlife, National Parks and Tourism has lifted the ban on hunting in the Central and North West districts following the Ministry of Agriculture's Report that the foot and mouth disease in those areas "has been encouraging especially in wildlife." The press release from the department announcing the lifting of the ban which was imposed after the outbreak of the disease said the improvement of the situation was responsible for the latest development. However certain restrictions were also announced. No wildlife products will be moved out of the area, trophies for Safari companies will be disinfected under the veterinary supervision before being removed either out of the zones or country, and movement of wildlife products within the districts will be by permit issued by the Animal Health Department. The lifting of the ban now means that hunting is now permitted in the whole country. [Text] [Gaborone DAILY NEWS in English 14 Jun 78 p 1]

CSO: 5400

## BRAZIL

### AGRICULTURE MINISTER REFUTES CHARGES

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 Jun 78 p 32

[Text] "We are not going to coexist with the African swine fever because it is our determination to eradicate the disease from the national territory. The presence of the virus in Brazil can even affect all exports, be they of animal or vegetable origin, because any object can be a carrier," said yesterday the national secretary of Agriculture-Livestock Protection of the Ministry of Agriculture, Jose Alberto Lira.

According to him, contradictory reports are being circulated, which only serve to confuse the present picture, and therefore he warned that only information cleared by the Ministry of Agriculture in Brasilia has the official approval. He said that up to now only nine centers of the disease have been confirmed, five of them in Rio de Janeiro, one in Minas Gerais, and three in Sao Paulo. The rest are suspected areas.

#### Paulinelli

In answer to charges that the Ministry of Agriculture is responsible for the presence of African swine fever, made by the Sao Paulo State Federation of Agriculture, Minister Alysson Paulinelli said that this is not the time for making charges, and pointed out that if the chairman of the FAESP [Sao Paulo State Federation of Agriculture] had made a report 2 years ago calling attention to the use of food leftovers from international flights, "I can say that it is not the responsibility of the Ministry of Agriculture to control the airports of the country." At the same time the national secretary of the Agriculture-Livestock Protection, Jose Alberto Lima, said that since 1963 the Ministry of Agriculture has been alerting the authorities responsible for airports to this problem of using food leftovers.

The minister of Agriculture said that it is very difficult to determine the origin of the center of infection confirmed in Ourinhos, but added that he is sure that in all cases the basic element of transmission is garbage. Jose Alberto Lira said that in Ourinhos the disease appeared precisely where there was no sanitary control over breeding.

Paulinelli said that there is a natural concern, and this is being stimulated by the government itself, in order to prevent self-interests and obstruction of the work for the eradication of the disease. For example, he said that in Ponte Nova, in Minas Gerais, there were charges of the existence of a swine fever center of infection. "Our veterinarians," he said, "went to the ranch and noticed that the death of animals was being caused by serious erysipelas, responsible for the death of 12 percent of the local herd."

The real situation of the disease, as of yesterday, according to Jose Alberto Lira, was as follows: Rio de Janeiro, confirmed centers of infection in Paracambi, Nova Brasilia slum, Teresopolis, Alcantara, and Campos; Sao Paulo, disease confirmed in Ourinhos and Roseira, and Leme is under strong suspicion, but confirmation of this may arrive today after laboratory tests; also in Minas Gerais, disease confirmed in Volta Grande.

The suspected centers of infection are located in Sao Paulo--Pindamonhangaba, Sao Jose dos Campos, Santa Cruz do Rio Pardo, Socorro, Martinopolis, Araras, and Conchal; Santa Catarina--Crisiuma, Quilombo, Xaxim e Xensere; and in Parana only in Perola.

The secretariat yesterday established an organization involving all the official federal, state, and municipal entities, including the armed forces, for fighting the disease. Several task forces have been created as follows: "Operation Garbage," which will be in charge of destroying garbage deposits at airports, or those close to cities where there is hog breeding. "Operation Center of Infection," which will be engaged in epidemiological search, capture, and slaughter of contaminated animals, or animals suspected of being contaminated, with the cooperation of the Veterinary Department of the Ministry of the Army which has already sent 150 veterinarians to help the Ministry of Agriculture. "Operation Survey," which will survey the hog population in the areas of centers of infection, those close to these centers, and areas of influence that could be considered essential for the eradication of the fever. "Operation Social Communication," responsible for disseminating all measures taken by the government authorities including campaigns among hog breeders, so that they may immediately alert sanitary authorities if their animals should show any abnormal behavior, because in the case of Paracambi, for example, the breeder had diseased animals for over 1 month. "Operation Transport," which will be in charge of checking the movement of animals, vehicles, or persons in the areas under suspicion. "Operation International Cooperation," which will try to maintain contact with international research organizations in order to obtain any type of help, such as, for example, supply of powerful disinfectants by the United States. "Operation Repercussion," which will try to follow the economic and social repercussions in function of the presence of swine fever, as in Santa Catarina, where all packing houses that work with hogs have suspended their activities. Indemnization to hog breeders who had to kill the animals, will be the responsibility of this group.

11634  
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BRAZIL

AFRICAN SWINE FEVER SPREADS, CROSSES STATE BORDER

Rio de Janeiro O GLOBO in Portuguese 17 Jun 78 p 13

[Text] The fifth and sixth focus of infection of African Swine Fever in Brazil were identified yesterday in the municipalities of Campos in the state of Rio, and in Ourinhos, Sao Paulo, near the border with Parana. The team fighting the disease reiterated yesterday in Niteroi that all the hogs in the state of Rio will be slaughtered and burned. The meat of healthy hogs will not be sold, it was announced. The storage of the meat, according to technicians, would be "the packaging of the swine fever virus."

In Campos and Ourinhos, the slaughter of hogs raised near the places where outbreaks were confirmed began yesterday. In Campos, the focus of infection located at the Piedad Ranch in a garbage dump where the rancher disposed of the carcasses of hogs which had died of the disease. In Paracambi, site where the epidemic began, all the hogs located in the area of infection have already been destroyed. Yesterday, the slaughter of hogs in the municipalities of Teresopolis, Sao Goncalo (in Alcantara) and in the Nova Brasilia slum in Rio, continued. Nearly 5,200 hogs in 567 localities have already been killed up to date.

Yesterday veterinarians of the Ministry of Agriculture began a campaign on the highways and airports of the state of Rio and in the infected area of Ourinhos, Sao Paulo, with a view to preventing the passage of any animal products. The technicians explained that "even pieces of linguica, mortadela, salsicha [types of sausage] and ham could be carriers of the African Swine Fever virus."

Today at 1000, the national secretary for the inspection of animal products, Domingos Pinquosqi, will meet with all industrialists of the state of Rio, who sell pork or its byproducts, at the Botanical Garden of Niteroi. Although they do not use pork or its byproducts from the state of Rio, but from Parana, Santa Catarina and Rio Grande do Sul, the industrialists complain about the harm being caused by the ban on the movement of pork. According to them, plants have been idle for more than a week, and some slaughterhouses, which also bring in hogs from the south, halted their activities at the beginning of the month.

## "National Concern"

State Secretary for Agriculture Jose Resende Peres said that in the meeting held this week in Sao Paulo, "concern about swine fever was expressed on a national level." The secretaries of agriculture of Sao Paulo, Minas, Espirito Santo, Rio Grande do Sul and Rio de Janeiro participated in the meeting.

"It is obvious," he declared, "that we are very concerned with the state of Rio because it is here that the disease has to be halted, but Rio has only 191,000 head of hogs and the entire Brazilian herd numbers 34.1 million head. That disease came at an inopportune time. There was a drastic reduction in breeding livestock and not much was spent on renewal of stocks. Pork would be an alternative for a crisis of supply which will certainly take place some time.

## Isolated Garbage Dump

The garbage dump near the thermoelectric plant on the Campos-Itaperuna highways, where the focus of infection of swine fever was found, was isolated yesterday. This morning, technicians of the Ministry and Secretariat of Agriculture began the slaughter of 53 pigs captured near the site. The area was cordoned off at 1800 yesterday by soldiers of the 56th Infantry Battalion.

Last night, technicians Oswaldo Regis and Paulo Cesar Medeiros, before returning to Rio, said that it will be necessary to eliminate garbage dumps in Campos to prevent the spread of the disease. They reported that there are reports of deaths among hogs in Sao Fidelis.

A team headed by American technician Robert Richards will begin a search operation today to find focuses of infection of the disease in Campos. Percy Pereira Rangel, owner of 3,000 head of hogs in Campos, believes that the slaughter of pigs "should not be restricted to the state of Rio only but should be extended to the entire country to insure the eradication of the swine disease."

"If I were to be indemnified by the government on the basis of 20 cruzeiros per kilogram of hog, I would lose nearly 1.5 million cruzeiros. Breeding stock is expensive and cannot be appraised as hogs destined for the slaughterhouse. I isolated my farm from the beginning of the swine disease and no one enters it without being disinfected first," he said.

The appearance of a focus of infection in Campos, in the opinion of veterinarians who work in the Botanical Garden of Niteroi, reinforces the initial theory of the technicians, who suggested the slaughter and cremation of all the hogs in the state. The discovery of the focus of infection in the northern part of the state of Rio eliminated the initial plan, which was to slaughter the pigs between the Paraiba River and the coast, leaving the slaughter of the hogs of the northern municipalities of the state for a second phase.

The veterinarians said that the majority of the focuses of infection were found in garbage dumps, for which reason they supported the suggestion by the secretary of agriculture to ban the raising of hogs in urban areas and the construction of incinerators at all international airports of the country with a view to preventing the entry into the country of the swine fever virus in leftover food from other countries, particularly from Africa.

With the appearance of a focus of infection in Ourinhos, the veterinarians of the Ministry of Agriculture rejected the theory that Paracambie was the first infection point for the disease in Brazil. Everything will be clarified after the end of the work of tracing the disease, which will lead to its origins.

"With the confirmation of the disease is a restricted area--the state of Rio can be considered as such--all the work is aimed at eradicating the virus of the disease. With the appearance of several focuses of infection in the country, the thing to do is to control it," said a technician of the Ministry of Agriculture.

The technicians believe that cremation of all the hogs in the state of Rio is "an expensive but economical measure."

The state of Rio raises only about one percent of the national hog herd. The work of slaughtering all the hogs of the state is expensive and complex but necessary because only thus can all the hogs in Brazil be protected.

The same measure adopted in the state of Rio--that of slaughtering all the hogs without making use of the meat of those not affected by the disease--will also be used in the infected zones such as in the case of the Sao Paulo, municipality of Ourinhos.

The technicians preferred not to comment on the hypothesis of the existence of new swine fever infection focuses in Sao Paulo, Parana or other states. They admitted that delay in slaughtering the hogs in the state of Rio "could aggravate the situation," but reminded us of the complexity of the problem, "because not all the raisers and industrialists accept the slaughter; the situation has to be discussed among the various ministries and state agencies, and there is a need for very large sums of money for indemnifying the hog raisers."

The slaughter of all the hogs of the state of Rio should begin in the first days of next week, with teams consisting of army soldiers and veterinarians of the Ministry and State Secretariat of Agriculture. The plan is to create 40 teams, which will leave from the borders with Espiritu Santo, Minas Gerais and Sao Paulo and work their way in the direction of the coast of Rio. The soldiers and veterinarians will go from house to house and slaughter the hogs using three systems depending on the local situation: sledge-hammer blows, stilleto pistols [as published] or gas chambers, which will be used mainly in places where there are a large number of hogs.

## BRAZIL

### AFRICAN SWINE FEVER SPREADS TO MANY STATES

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 Jun 78 p 32

[Text] Sao Paulo Secretary of Agriculture Paulo da Rocha Camargo yesterday confirmed a fourth center of African swine fever in Sao Paulo in Roseiras municipality (previously the disease had been confirmed in Ourinhos, Socorro and Leme). In addition, according to the secretary, there are other municipalities where sick animals have appeared their specific disease will be known in the next few days.

The swine fever was also confirmed yesterday in a third state--Minas Gerais--in Volta Grande municipality, according to an announcement made by Secretary of Agriculture Agripino Abranches Viana. In Parana, Santa Catarina, Rio Grande do Sul and Mato Grosso do Sul suspected cases have appeared and are being investigated.

An expert of the Ministry of Agriculture reported yesterday that the health personnel are not going to wait for confirmation of the disease in the Sao Paulo municipalities of Santa Cruz do Rio Pardo, Martinopolis, Araras, Conchal, Pindamonhangaba and Sao Jose dos Campos. "The order is to slaughter all the sick animals," said the expert.

The Minas Gerais administration has already taken preventive measures ordering that all hogs within a 16 km radius of Volta Grande municipality be killed. Although the herd in the municipality is small--about 2,500 head--the appearance of the center of disease caused concern among Minas Gerais authorities, because the affected municipality is located in the slaughter zone responsible for 30 percent of the production of pork in the state. The Agriculture Secretary Agripino Abranches Viana said that of the 4.5 million head in the Minas Gerais herd, about 1.35 million are raised in the region.

In Riberao Preto, the chairman of the Sao Paulo Hog Breeders Association, Wagner Marchesi, said that the appearance of centers of infection in various regions shows that the African swine fever has been present in the country for some time despite the fact that it has only now been officialy acknowledged.

In Brasilia, Agriculture Minister Alysson Paulinelli replying to criticism from the Sao Paulo State Federation of Agriculture, said that "this is not the time for making charges," and reminded the chairman of the organization, Fabio Meirelles, that it is not the responsibility of the Ministry of Agriculture to control the airports of the country. The minister was referring to the fact that the first confirmed center of swine fever was in Rio de Janeiro State.

#### Rio de Janeiro: To Stop All Slaughter

With the swine fever already affecting three states and its presence suspected in Parana and Santa Catarina, the epidemiologists of the Ministry of Health are going to suggest to Minister Alysson Paulinelli to order the suspension of slaughter and cremation of the entire hog herd of Rio de Janeiro State, where the first five centers of infection were detected.

The same suggestion was made yesterday by the Rio de Janeiro State secretary of agriculture, Jose Resende Peres, who used the same argument that will be used by the experts: that the slaughter and cremation of all the hogs in the state was a valid option while there were hopes that with the drastic measures the disease would be eradicated in the country. Since now the disease has spread beyond the borders of Rio de Janeiro State, the total extermination in only one state will be of no use.

Thus, the experts and the secretary are defending the suitability of coexisting with the disease, but with the slaughter and cremation of hogs in the focal areas, that is, within a 16 km radius of the place where the disease was discovered. Apparently this is the policy put into practice by the ministry because the decision for general slaughter of the Rio de Janeiro State herd was not carried out. Previously, the first case of the disease appeared in Sao Paulo, which led the experts to begin studies to change the strategy in the fight against the virus which is immune to vaccines.

#### Financing

The secretary general of the Meat Industry Association of Rio de Janeiro, Cyro Damm, yesterday reaffirmed the intention of the sector to demand from Finance Minister Mario Henrique Simonsen financing in the amount of 500 million cruzeiros, to prevent the forced paralyzation caused by the African swine fever from resulting in unemployment and even bankruptcy of some firms with little capital.

With the stocks of pork sufficient for 15 days and the ban on processing, the 20 businessmen who make up the association, only want, in addition to official financing, the government to make a prompt decision on the manner of fighting the disease, so that then they can take the necessary measures for the operation of their industries some of which, as Belprago, the main supplier of the Rio de Janeiro market, are already thinking of dismissing employees. According to Cyro Damm, the Rio de Janeiro industry gets its



hogs from Santa Catarina, this is the reason the businessmen are not concerned with what becomes of hog breeding in Rio de Janeiro State.

#### Delay in Reporting to Santa Catarina

The Santa Catarina Secretariat of Agriculture, as of yesterday afternoon, had not received the results of the examination of the hog that died in Quilombo municipality. The sample was sent to the Virology Institute of the Federal University of Rio de Janeiro and, since the laboratory was closed on Sunday, the authorities believe that the results will arrive only today. In the meantime, new suspected cases have been detected in Crisciuma, Chapeco and Armazem municipalities.

According to estimates, if the African swine fever spreads throughout the state, the damages will surpass 4.5 billion cruzeiros, affecting about 1 million persons, because hog breeding is one of the main sources of income in the economy of the state in the area of production, as well as in the area of processing. Concerned with the socioeconomic impact, the authorities of Santa Catarina State are on the alert.

According to official data, about one-third of the gross value of agricultural-livestock production of Santa Catarina is in corn and pork. It is precisely these products that are threatened either by the drought (corn) or by the possibility of the appearance of swine fever.

Of the 164,000 producers who are engaged in hog breeding, for 50,000 it is their main source of income. In the industrial sector, hogs are the main raw material for 16 packing houses, between Sadia, Perdigao, Seara, Saic and Fricoper. A total of approximately 800,000 persons depend on hog breeding in the production area and more than 100,000 in the industrial area.

#### Mato Grosso: Expectation

The still officially unconfirmed presence of four African swine fever centers in Mato Grosso do Sul, created a climate of apprehension among the traditional regional producers who fear that they will lose their herds. Unconfirmed charges indicate that the centers have allegedly appeared in the cities of Bataguassu, Nova Andradina, Anaurilandia and Anastacio. However, no tests have been made that would positively determine the appearance of the disease in these regions. Samples have already been collected for laboratory examinations, and the results are expected to come in a few hours, according to sources at the regional office of the Ministry of Agriculture.

At an estate in Bataguassu, an unidentified illness killed about 150 hogs. In New Andradina and Anaurilandia, an equal number of hogs died. The losses in Anastacio are close to 80 animals.

## Ijui Loses 100 Hogs

The death of about 100 hogs during the last 15 days in Ijui Municipality, 422 km from Porto Alegre, caused speculation about the presence of African swine fever in Rio Grande do Sul. While the experts of the Veterinary Research Center of Porto Alegre believed that it could be the swine fever, since no medication or vaccine prevented the death of the animals, the chairman of the Hog Breeders Association, Helio Miguel de Rose, said that "the problem in Ijui has nothing to do with the African swine fever." He based his statement on the report given by veterinarian Luis Alberto Pita Pinheiro, of the Secretariat of Agriculture, who admitted the presence "of a health problem" in the locality.

Despite assuring everyone that it was not African swine fever, "because autopsies were made of the dead animals," Helio de Rose could not give any information on the cause of the death of the hogs, saying that "I was only concerned in determining that it was not the African swine fever, and did not ask the veterinarian what really happened."

In addition to this threat, yesterday the leaders of Rio Grande do Sul producers were worried about closing down of the 40 packing houses in the state (Tamo S.A., of Federico Westphalen, and of the city of Santo Angelo), as the result of abrupt drop in the sales of hog by-products. Helio Miguel de Rose yesterday did not have any idea of the damages caused by the closing, but the sales director of the Tamo packing house, Darci Angonio Mariote, believes that the reduction in sales is about 90 percent, especially in the center of the country.

Secretary of Agriculture Getulio Marcantonio; Director of the State Department of the Ministry of Agriculture Cleber Canabarro Lucas; president of the hog breeders and representatives of the state secretariats of finance and health met yesterday to evaluate preventive measures taken in the south. According to the director of DEMA [State Department of the Ministry of Agriculture], careful watch is being implemented in the ports, airports and border posts of the state to prevent the entry of hogs and their by-products into Rio Grande do Sul. All food leftovers from planes and ships are being incinerated at the Jockey Club.

At yesterday's meeting of state authorities it was decided to cancel hog exhibits scheduled to take place in the state, and a commission of seven experts and veterinarians was formed to direct control work against the African swine fever in Rio Grande do Sul.

## Municipalities of Northern Parana Isolated

Nine municipalities in northern Parana, close to the border with Sao Paulo, were isolated yesterday because of suspicion that a new center of African swine fever has appeared in Jacarezinho. The decision was made after a

meeting held at the regional office of the Ministry of Agriculture in Curitiba, coordinated by the Animal Health Emergency Commission created in order to take preventive measures against the disease.

The municipalities are: Jacarezinho, Cambara, Andira, Santo Antonio da Platina, Barra do Jacare, Carlopolis, Joaquim Tavora, Riberão Claro and Itamaraca. In spite of this, Roulien Basaglia, state director of the ministry, said that "officially, the slaughter of hogs in this region is limited to the district of Costa Junior (which belongs to Jacarezinho, the city closest to Ourinhos, where a center of African swine fever has already been confirmed).

On Sunday, experts of the Secretariat of Agriculture visited 11 estates in that area and confirmed the death of 85 animals and 23 more that were slaughtered yesterday. The samples gathered were sent yesterday to Rio de Janeiro, and therefore, said Basaglia, it has not been possible to learn "whether the ailment is the African swine fever, or a common fever." The difference between the two is that there is preventive treatment for the common one, while there is none for the African fever.

In the isolated area all movement of live hogs or their by-products is prohibited, and today it will be decided whether the transit of other animals will be allowed. Up to the end of yesterday afternoon, the Emergency Commission has not defined the measures to be taken, but the regional director of the Ministry of Agriculture said that tomorrow morning "at the latest, it will be possible to explain to the people what will be done."

Yesterday, on the border between Jacarezinho and Ourinhos, over 1,000 hogs were stopped because the Sao Paulo control team was preventing the access even of the animals that had health certificates.

#### "Negligence"

The chairman of the Hog Breeders Association of Parana, Inivaldo Martini, feels that "negligence in the control service, which did not take measures to prevent the hogs being fed with leftovers from planes, represents a crime against national security, because there is legislation prohibiting the use of such food."

He also said that more negligence of the Ministry of Agriculture in its health inspection service could create a problem identical to that of the African swine fever, if urgent measures are not taken: On the 5th of this month a telex was sent to the minister of agriculture alerting him about the importation of 500 stud hogs by the firm Agrocere, of a lot of 3,000 head purchased in France "without fulfilling the prevailing norms concerning the health conditions of the firm." These animals--according to Martini--really come from England where a little less than 1 year ago vesicular disease was present.

## Survey

The Secretariat of Agriculture of Parana should complete a survey by the end of the week of all hog breeders in each region of the state, and the importance of that activity to them, in order to determine the economic repercussion which the spread of this swine fever could have. In the total of ICM [Tax on Movement of Merchandise] collections, hog breeding represents only 5.37 percent, but there are some regions in which small land holdings which depend almost exclusively on hog production predominate.

## Fear in Argentina

Buenos Aires--Marcos Wilson, our correspondent--The publication by the main Argentine newspapers of reports from Brazil according to which "contaminated pork was allegedly being shipped to Argentina and Uruguay," is causing concern to the managers of packing houses in Buenos Aires and the health authorities of the country. A telegram from the Spanish news agency EFE prominently displayed by Argentine newspapers, said that "the rumor that contaminated meat is allegedly being sent to Argentina, is being considered truthful in journalistic circles." The same telegram says that the swine fever has not only provoked a national emergency, but also represents a great threat of international contamination. The place of origin of the telegram by the Spanish news agency is Rio de Janeiro.

11634

CSO: 5400

## BRAZIL

### AFRICAN SWINE FEVER EPIDEMIC SPREADS

#### Sao Paulo Outbreaks

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 22 Jun 78 p 34

[Text] The secretary of agriculture, Paulo da Rocha Camargo, announced yesterday that federal government health workers have confirmed the outbreak of African swine fever in two more municipalities in the state of Sao Paulo (Fartura and Jundiai), and that as of the end of the afternoon, about 5,000 head of swine had already been slaughtered in the various disease centers established earlier. "In Ourinhos alone 3,500 swine were slaughtered," the secretary said. With the confirmation of two more centers of the disease, there are now six Sao Paulo municipalities where this African plague is affecting the herds: Ourinhos, Socorro, Leme, Roseira, Jundiai and Fartura.

Rocha Camargo, who met at length with the representative of the Ministry of Agriculture in Sao Paulo, Guilherme Junqueira, yesterday, and with technicians of the CATI [Overall Technical Aid Coordination] and the Biological Institute, said that "only the animals in the disease areas and adjacent property will be slaughtered." But according to Ministry of Agriculture technicians, all of the swine located within a radius of 16 kilometers from the disease centers will be slaughtered, without regard for property lines.

#### Doubt

"The greatest problem caused by the slaughtering of the swine because of swine fever is not simply determining how long it will take for the country to have a swine herd equal to that at present, but rather to determine if the sector will in fact be capable of renewal," Rocha Camargo said at the Bandeirantes Palace, after a meeting with Governor Paulo Egydio. According to the secretary, "another major problem which has favored the proliferation of the disease is the existence of backyard breeding operations where the owners, instead of balanced feed, give the animals swill." Food scraps are vectors which propagate the virus which causes the African plague.

In Ourinhos, although Ministry of Agriculture technicians have promised breeders that they will be compensated at the rate of 240 cruzeiros per

arroba for animals slaughtered because of the plague, many are dissatisfied because they have breeding herds of fine stock in which a sire or breed sow may be worth 20,000 cruzeiros. The Central Assessment Commission of the Ministry of Agriculture will be responsible for resolving this problem. There was also much confusion in that municipality yesterday because the health authorities were not certain if the swine were to be shot or bludgeoned. The slaughtering operation was postponed until this morning.

In the Sao Jose do Rio Preto region many farmers are frustrated because they were seeking to establish swine-breeding operations on their plots as an alternate activity, after suffering serious losses due to the drought. The African swine fever outbreak in the state has blocked that possibility at least in the short run.

In accordance with a request from the State Civil Defense Administration, the prefects of the seven municipalities in the ABC (Santo Andre, Sao Bernardo do Campo, and Sao Caetano do Sul) industrial region yesterday ordered the launching of a project to survey the local swine herd and to provide instructions to hog breeders about preventive measures to combat swine fever. The swine herd in the region is estimated at 4,000 head. Trade and industrial establishments in the ABC are being urged not to supply food scraps to hog breeders.

#### Espirito Santo

The discovery of a new outbreak of African swine fever in the municipality of Bom Jesus de Itabapoana, in the state of Rio de Janeiro, located on the boundary between that state at Espirito Santo (separated from the municipality of Bom Jesus do Norte in the latter state only by a river), led the secretariat of agriculture to intensify surveyance on the boundary between the two states yesterday, with the mobilization of 40 soldiers of the 38th Infantry Battalion, an army unit stationed in Vitoria.

In Minas Gerais, the federal representative of the Ministry of Agriculture reported yesterday that the focus of African swine fever which developed last week in the municipality of Volta Grande in that state, located on the boundary with the state of Rio, has been eliminated. According to the representative of the ministry, Auricedes Alves Moreira, prompt action by the technicians prevented the virus causing the disease from spreading to other areas of the state.

The director of the Guaiba Veterinary Research Institute in Rio Grande do Sul, Milton Guerreiro, reported that laboratory tests made of the viscera of some of the 100 head of swine dead of the disease in Sao Valentim, 460 kilometers from Porto Alegre, showed that the animals contracted this classic hog ailment because they had not been vaccinated. However, the ministry official added that all of the preventive measures adopted will remain in effect.

As of yesterday, the entry of live hogs into the state of Para was prohibited by a decree signed by Governor Aloysio Chaves. Thirty-five technicians were assigned to surveyance duties. They will make inspections at the entry points in Gurupi and Itinga, on the boundary with Maranhao, and Conceicao do Araguaia, on the Goias boundary.

A hog breeder in the municipality of Cachoeira do Arari has reported the contamination of his swine, which had begun to die rapidly, to the secretariat of agriculture. The results of laboratory studies of the material collected and sent in will not be known for ten days.

The secretariat of agriculture of Santa Catarina has not yet received laboratory results from the other samples of swine tissue sent to Rio de Janeiro in connection with some suspicious cases detected in the municipality of Criciuma and Armazem in the southern part of the state.

#### Economic Repercussions Felt

Rio de Janeiro O GLOBO in Portuguese 21 Jun 78 p 19

[Text] The swine fever epidemic is already beginning to have major repercussions on the economy. Commercial banks are reducing credit to cold storage plants and enterprises for the industrial processing of pork out of fear that the plague may cause a decline in the sales of this product, and thus a decrease in company invoicing. The banks are not only limiting credit but beginning to collect previous loans. In addition to the credit restrictions on enterprises dealing in pork, government technicians fear a slight increase in the prices of substitute products (beef, chicken). Ministry of Agriculture statistics show, however, that pork consumption is not of a volume likely to cause an increase in the demand for substitute products. Pork meat and fat are generally consumed after industrial processing. The most serious threat in this instance is likely to be to the swine breeders whose herds have not been affected by the plague.

5157

CSO: 5400

BRAZIL

SWINE FEVER SHOWS WEAKNESS IN CONTROL SYSTEM

Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 30 Jun 78 PY

[Commentary by Alberto Tamer: "African Swine Fever: A Lesson To Brazil"]

[Text] African swine fever was discovered in Brazil a month ago and so the above 10,000 animals have been slaughtered. The worrisome aspect of this problem is that it has not yet been brought under control or even isolated within areas. The disease appeared in Rio de Janeiro State on 14 May and spread slowly to the states of Sao Paulo, Minas Gerais, and Parana, and the existence of 28 new focuses [as heard] was announced today.

The conclusion to be drawn from this is that the government does not have an efficient system of sanitary protection. Fortunately this is not the most serious animal disease, but what if it were? This is the lesson: We lack an efficient system of protection of animal health, in a basically agricultural country like ours. The appearance of African swine fever in Brazil exposed a weakness which must be corrected.

CSO: 5400



BRAZIL

FOOT-AND-MOUTH DISEASE OUTBREAK IN SAO PAULO CONFIRMED

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 22 Jun 78 p 34

[Text] In Campinas yesterday, Overall Technical Aid Coordination technicians confirmed the outbreak of foot-and-mouth disease in herds in Sao Joao da Boa Vista, Aguai and Vargem Grande do Sul, and they reported that the disease is suspected in the municipalities of Espirito Santo do Pinhal and Aguas da Prata. At least eight centers have been officially established by CATI [Overall Technical Aid Coordination] veterinarians, who have recommended to the secretariat of agriculture that the Sixth Agricultural, Industrial and Trade Exhibit in Sao Joao da Boa Vista, where there are 212 sick animals, be cancelled.

The technicians have reported one fatal case and say that the situation is under control, since the vaccination of the entire herd in the area is being carried out with a view to covering the 50,000 animals in the region. The vaccine, provided by the Ministry of Agriculture, provides protection against the three main virus varieties. Thus far it has not been necessary to slaughter any of the animals affected. At the two centers located in Aguai, there are 36 sick animals, and there are 65 in Vargem Grande do Sul.

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CSO: 5400

## BRAZIL

### BRIEFS

ARMY SWINE-HERDS CONTROL REQUESTED--Belo Horizonte--Troops of the 4th Army Division may control the Minas Gerais-Rio de Janeiro state border beginning tomorrow to hinder the Rio de Janeiro swine producers from illegally taking their animals to Minas Gerais farms. The authorities have ordered the slaughter of all swine herds in Rio de Janeiro State. (Aurice de Alves Moreira), agriculture federal delegate, has requested agriculture minister, Alysson Paulinelli, and Army minister, Belfort Bethlem, to order the intervention of the army. [Text] [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 15 Jun 78 PY]

AFRICAN SWINE FEVER MEASURES--The boundaries between the state of Rio de Janeiro--which agriculture minister, Alysson Paulinelli has declared as possibly being contaminated--and the states of Sao Paulo, Minas Gerais and Espiritu Santo are under close control by the sanitation officials of the three states to prevent the dissemination of the African swine virus, which was brought into Rio de Janeiro through the leftovers of food secretly taken from the international airport. The national secretary for livestock and agriculture protection slaughtered over 500 pigs attacked by the virus in Barra do Pirai. At the Nova Holanda shantytown in Bonsucesso, 170 animals are under observation, but Agriculture Ministry technicians do not know how many animals there are in Nova Holanda. [Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 7 Jun 78 p 1 PY]

SWINE FEVER OUTBREAK--The Agriculture Secretariat of Sao Paulo has reported that another 11 cities are under suspicion of being affected with African swine fever: Santa Cruz do Rio Pardo, (Maracai), Marilia, Ribeirao Preto, (Arcinopolis), Araraquara, Araras, Terra Negra, Mogi Guacu, Prassununga and Pindamonhangaba. [Text] [Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 27 Jun 78 PY]

MINAS GERAIS SWINE FEVER--Belo Horizonte, Minas Gerais State, the third-largest national producer of swines with 4.6 million head, has also been stricken by the African swine fever and needs special attention from Agriculture Ministry officials. Bewildered Minas Gerais State officials have announced a new outbreak of the disease in Igarape, a district of Belo Horizonte. [Text] [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 28 June 78 PY]

SWINE FEVER IN MORE CITIES--The agriculture secretariat of Sao Paulo reported that African swine fever is suspected in another 11 cities. They are Santa Cruz do Rio Pardo, (Maracai), Marilia, Ribeirao Preto, (Arcinopolis), Araraquara, Araras, Terra Negra, Mogi Guacu, Prassununga and Pindamonhangaba. [Text] [Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 27 Jun 78 PY]

SWINE FEVER IN MINAS GERAIS--Belo Horizonte--Minas Gerais State, the third-largest national producer of swines with 4.5 million head, has been stricken by the African swine fever, and needs special attention from Agriculture Ministry officials. Bewildered Minas Gerais State officials have announced a new outbreak of the disease in Igarape, a district of Belo Horizonte. [Text] [Porto Alegre Radio Guaiba in Portuguese 0200 GMT 28 Jun 78 PY]

10,000 HOGS MAY DIE--Belem--Agriculture Ministry experts have reported that approximately 10,000 hogs will die in Para State as a result of the hog cholera disease which has stricken Marajo Island almost epidemically. [Text] [Porto Alegre Radio Guaiba in Portuguese 2150 GMT 29 Jun 78 PY]

CSO: 5400

## BURMA

### BRIEFS

DRAFT CATTLE INOCULATED--Kyaunggon, 15 Jun--A team of veterinarians headed by U Aung Khin and U Khin Maung of the Foot and Mouth Disease Research Laboratory, Rangoon, arrived in Tagundaing and Byaik villages in the model livestock development zone of this township to take samples of blood from cattle suffering from foot and mouth disease to carry out research work. As the disease is widespread in the township, the team administered preventive inoculation to more than 400 cattle. Five hundred draft cattle in Ngathainggyaung, 275 in Thingondaung village where high-yield paddy is cultivated and more than 700 in Bassein East and West townships have also been inoculated. [Text] [Rangoon THE WORKING PEOPLE'S DAILY in English 20 Jun 78 p 1]

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CSO: 5400

## ANIMAL DISEASES SUCCESSFULLY COMBATED

Nicosia CYPRUS MAIL in English 8 Jun 78 p 3

[Text]

**N**ATIONAL Guardsmen helped vaccinate four million chickens in a two-week blitz against new-castle disease.

Last year nearly 500,000 sheep, goats and cattle were also vaccinated against foot-and-mouth disease, 361,508 sheep and goats against enterotoxaemia and 70,209 pigs against erysipelas by the Veterinary Services of Cyprus.

Besides providing medical examinations and vaccinations the services announced in their annual report for 1977, that the activities of the department were extended to the control and certification of animals and animal products. Dairy products destined for export were especially pointed out.

The Department has 18 veterinary stations operating along with 26 mobile clinics that visit villages.

Blue tongue, a disease affecting sheep was also combated with only 549 deaths.

The level of echinococcosis infection in food animals during 1977, compared with that in the first year of the campaign in 1971, showed a 95% reduction in goats, a 93% reduction in cattle 77% in sheep and 100% in boars and sows.

Animals born after 1971 are totally free from infection.

The disease, which also affects man, has been reduced by 90% compared to the degree of infection before, with only 13 people in 100,000 getting it.

Measures are still being taken as part of a 15-year campaign designed to eradicate the disease. Control of stray dogs by gassing and spraying of bitches is being practiced as are stricter surveillance measures in slaughter houses.

Artificial insemination for breeding in cows also increased. Over 3,000 cows were bred in such a manner last year.

A Laboratory for Meat Microbiology, thought to be the best in the Middle East and as good as any in Europe has also been completed.

Through this laboratory and continued medical research on animal diseases, the veterinary services are trying to become more efficient regarding the prevention of disease in livestock, their transmission to the human population, and proper surveillance of animal products.

## HUNGARY

### LIVESTOCK EPIDEMIC CONTROLS ONLY PARTLY ENFORCED

Budapest MAGYAR HIRLAP in Hungarian 20 Jun 78 p 7

[Excerpts] There has been no livestock epidemic in Hungary for 6 years. We have successfully protected our hogs and cattle from mass infection. A large portion of European herds were infected with foot and mouth disease in 1972-1973, including those of Hungary. Damage amounted to several billion forints and stemmed less from destruction of livestock than from export loss and money spent on curbing the disease. Since then we have succeeded in keeping even the threat of epidemic outside the country. According to Dr Lajos Denes, head of the main department of food and veterinary hygiene of the Ministry of Agriculture and Food, this is due chiefly to certain steps which have been taken.

"Initially, regularly administered protective inoculations were mandatory throughout the country; more recently they are administered in the eastern counties. Thus a barrier has been raised against foot and mouth disease. We have adequate reserves of vaccine to cope with the viruses native to Europe. So far we have succeeded in keeping exotic, non-European viruses out of the country by forbidding import of meat, meat products and leathers from those countries where said viruses occur.

"The information system between the socialist countries is gradually improving. Epidemic alerts have become more reliable although cooperation should be intensified in some cases."

In response to a question concerning the possibility of introduction of African swine fever, prevalent in Western Europe, into Hungary, Denes replied, "Although importation of this disease is not out of question, there is hope that this will not happen. These viruses entered Spain via Portugal 20 years ago. Since then no cure nor prevention has been found for the disease. Animals are entirely without protection against the virus and must be slaughtered.

"The contagion entered Malta and Sardinia in March-April. Whether or not the contagion can be arrested in Italy is still an open question. Recently the International Bureau of Veterinary Hygiene asked the European governments

to set up relief funds to cover the cost of combatting the disease in the three affected countries.

"To keep the virus from entering Hungary from Italy and Sardinia we must prevent tourists from those countries from bringing meat products into our country. In any event we have never imported meat from them. Our primary task, however, is to systematically enforce fundamental regulations for prevention of epidemics. Even the most remote places where livestock is raised can separate and fence off their animals. Change of clothing before caring for the animals can be made possible as well. This is equally true in the case of small producers, who raise over half the pig herd. We made requests that such measures be taken through several forums.

"The regulations instituted since the epidemic 6 years ago require the farm to adhere to all requirements of veterinary hygiene. However, this does not always happen or is done only in part. The reasons for this can be found not solely in laziness or indolence: often the elementary conditions for meeting such requirements are lacking. About one-third of the quarters where livestock is raised are not even worth renovating and many others should be rebuilt. Not only can the requirements for raising animals not be met; it is more difficult still to ready such areas for preventing or averting an epidemic. According to a survey in Bekes County, not a single pig breeding facility abides by all rules of veterinary hygiene. The trouble is that the situation is no better on a nationwide basis. Often there is a lack of both money and will. In a good many places not even a fence is put up to protect the animals, let alone establishment of permanent areas for disinfection and change of clothing."

CSO: 2500

## MOZAMBIQUE

### FOOT-AND-MOUTH DISEASE OUTBREAK REPORTED

Maputo NOTICIAS in Portuguese 31 May 78 p 1

[Text] The outbreak of foot-and-mouth disease among the cattle in some districts of Maputo spread to the Muhape region, in the Chibuto district. This report was delivered at the meeting marking the beginning of the national vaccination campaign in Gaza province.

At that meeting, at which the provincial director of health, Bernardino da Costa, presided, and which was also attended by other officials of party and government bodies on the Gaza province level, the preventive steps decreed by the provincial government to isolate this epizootic focus were described.

In accordance with these measures, traffic by automobiles and other vehicles along the road linking the Chibuto and Guija districts, both in Gaza province, has been prohibited. Furthermore, all vehicles needed for the transportation of food supplies to trade establishments along the Chibuto-Capanhane route, as well as others which due to urgent need must use that route must register and receive respective authorizations from the veterinary department in that province.

Access to Alto-Changane and Maqueve will only be allowed along the mountain highway linking Chibuto with those settlements. The preventive measures decreed further prohibit the entry into and departure from the affected zones by individuals except in cases of emergency. In such cases, authorization to enter can be obtained from the veterinary departments, while departure will be authorized by the party bodies or the Mozambique police corps, in addition to which strict disinfection measures established for the purpose at the control posts will be implemented.

Until the disease is entirely eliminated, all traffic in animals, animal products and byproducts, wastes and feed in the affected area will be prohibited.

Furthermore, it was announced at the meeting described that the national vaccination campaign in Gaza province has been launched in the locality of Chidenguele, district of Manjacaze, where 2,000 persons have already been vaccinated.



MOZAMBIQUE

CATTLE VACCINATIONS TEMPORARILY HALTED

Maputo NOTICIAS in Portuguese 13 Jun 78 p 3

[Text] Two thousand seven hundred fifty head of cattle were vaccinated against trypanosomiasis and carbuncles at the beginning of this month in Dondo.

This campaign, which is being carried out by the veterinary department in Sofala, has been temporarily suspended for lack of transport facilities, it has been announced over the provincial broadcasting station of Radio Mocambique in Sofala.

It should be stressed that in the Dondo district, there are at present about 11,280 head of cattle, 1,300 sheep, 1,400 swine and 2,140 goats, distributed among three private enterprises and in state production sectors.

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CSO: 5400

MOZAMBIQUE

DOGS VACCINATED AGAINST RABIES

Maputo NOTICIAS in Portuguese 29 May 78 p 3

[Text] In the course of the campaign against rabies, 1,351 dogs have been vaccinated against that disease in the Namuno district, province of Cabo Delgado.

It should be stressed that the team pursuing the work of vaccinating the dogs has had the massive support of the local population. The team had to interrupt its work for lack of the anti-rabies vaccine, but resumed activity again on the 17th of last month.

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CSO: 5400

PARAGUAY

EFFORTS UNDERTAKEN TO DETECT SWINE FEVER

Asuncion HOY in Spanish 22 Jun 78 p 10 PY

[Excerpt] Agriculture and Livestock Minister Hernando Bertoni, accompanied by Director General Luis Pampliega and the president of the Animal Health Service, Juan Pablo Romero, stated yesterday to newsmen accredited to his ministry that a massive vaccination campaign against hog cholera will begin immediately in order to determine the exact moment in which the African swine fever, which is spreading in large Brazilian areas, appears here.

This measure will be adopted taking into consideration that the symptoms of the African swine fever are similar to those of hog cholera. This is why the two diseases may sometimes be confused, making it more difficult to detect any dangerous outbreak. Veterinarians throughout the country will begin working on this in order to cover the largest production centers as soon as possible.

The agriculture and livestock minister stated at this time the need for the people's cooperation in the fulfillment of the measures taken by the technicians, since it is for the good of the national swine production which is very highly developed by peasant families in our country. Bertoni indicated: "The problem is quite serious considering that so far no appropriate vaccine has been discovered to counteract the disease; all animals affected die, in general, and there is only a 5 percent possibility to cure them."

CSO: 5400

PARAGUAY

BRIEFS

AFRICAN SWINE FEVER MEASURES--The Agriculture and Livestock Ministry in view of the appearance of the African swine virus in Brazil, which may affect the swine herds in our country, specially in the bordering regions, has ordered the massive vaccination of the animals and has forbidden the entrance into the country of living swines, semen, and swine products and byproducts. [Excerpt] [Asuncion PATRIA in Spanish 25 Jun 78 p 7 PY]

CSO: 5400

# TICK-BORNE DISEASES IN CATTLE ON INCREASE

Salisbury THE RHODESIA HERALD in English 8 Jun 78 p 9

[Text]

THE breakdown of law and order in the Tribal Trust Lands, and the civil disobedience that was inevitable in such a situation, had resulted in a large build-up of ticks, with a consequent increase in cattle deaths from tick-borne diseases, it was said yesterday.

The speaker was Mr W. E. McNair, chairman of the Rhodesian Cattle Producers' Association, who was presenting his annual report at the annual congress.

"It is therefore of great importance to the cattle industry that these diseases should not be allowed to spread into commercial ranching land," he said.

## BRIGHT SIDES

Mr McNair described the past year as one of "escalating problems". One of the few bright sides to the industry was that it was the fifth year in succession with a generous rainfall, producing an abundance of grass and water.

Mr McNair said that unless the cattle producer

could look forward to a stable and solvent future, large areas of Rhodesia which were now producing cattle would become vacant.

"It is of tremendous concern to the association that this process has already begun," he said.

The normal problems encountered each year, generally of an economic nature, were added to this year to an increased extent by the security situation, Mr. McNair said.

EFFORT TO CONTROL FOOT-AND-MOUTH DISEASE

Salisbury THE SUNDAY MAIL in English 4 Jun 78 p 3

**[Text]** A 95 KM FENCE is being erected across a tribal area in the Lowveld to control the spread of foot-and-mouth disease to thousands of African-owned cattle. At the same time, a big vaccination programme is under way to provide a "safety belt", virtually encircling Fort Victoria, to prevent the disease reaching European farms.

The five-strand wire

fence is intended to plug the spread of the disease to African farmlands stretching deep into Matabeleland.

Dr Allan Hurrell, a senior official in the Government's Department of Veterinary Services, said: "You can expect the infection to spread with the movement of cattle through adjacent tribal areas. The fence is intended to control this."

Thousands of head of cattle are on African farmlands which have been infected or are at present infected in the Lowveld.

Preventive vaccination programmes in the tribal areas by veterinary service officials have been disrupted by terrorists.

**PROBLEMS**

Gangs have also added to the tribesmen's problems by wrecking dipping schemes aimed at controlling tick-borne diseases.

Several veterinary service officials have been murdered by terrorists and vehicles blasted by land-mines.

The fence erectors have been given protection during their work, which will last about three weeks.

The vaccination programmes in areas surrounding tribal lands provide almost total immunity for foot-and-mouth disease. It has to be repeated every nine months.

But it has meant that the cattle meet the rigorous health standards required at the abattoirs.

The Ministry of Agriculture has also ordered the destruction of buffalo in the Lowveld as a control measure for the disease. Buffalo are a major carrier of the disease.

SWAZILAND

BRIEFS

CHICK DISEASE--Mbabane--The Swaziland veterinary department has temporarily suspended the sale of live birds in the country following an outbreak of chronic respiratory disease among chickens. [Text] [Johannesburg THE STAR in English 22 Jun 78 p 8]

CSO: 5400

## VIETNAM

### BRIEFS

TAY NINH ANTI-EPIDEMIC ACTIVITIES--The Tay Ninh provincial agricultural service has sent veterinary cadres to various villages in Tan Bien and Chau Thanh districts to coordinate with the local agricultural bureaus in devising measures to eradicate epidemics and prevent them from spreading. The villages near pockets of contagion have administered anti-epidemic inoculations. [Hanoi Domestic Service in Vietnamese 1300 GMT 7 Jun 78 BK]

BOVINE TUBERCULOSIS--During 1975 and 1976 a total of ninety percent of the cow herd of 3,900 to 4,000 animals at the Dong Giao State Farm were tested and inspected for tuberculosis. In laboratory tests positive results were found in 4.3 percent of the herd, with suspect results in 3.8 percent of the herd. Two bacilli, DGB 25 and DG 60, were isolated and typed. We are only beginning to pay attention to bovine tuberculosis in our country. The findings in the cow herd at Dong Giao raise questions about the conditions of the swine herd at this state farm as well as of cow herds elsewhere in the country. [Summary] [Hanoi KHOA HOC VA KY THUAT NONG NGHIEP in Vietnamese No 5, May 78 pp 366-70]

CSO: 5400

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ZAIRE

BRIEFS

EFFORTS TO CONTAIN CHOLERA EPIDEMIC--AZAP, Bukavu--The regional commissioner and his guests reviewed the health situation in Kivu, especially in the areas of Uvira and Fizi, where the cholera epidemic which has broken out seems to have become stabilized in the center of Uvira and in the Ruziei Plain. Citizen Mutenda said that thanks to the efforts of the Executive Council, and with the contribution of international societies and bodies, this epidemic will soon be contained. The head of administration of the Shaba region also announced that more vaccine and medicines are awaited in Bukavu this week in order to fight this epidemic more effectively. [Excerpts] [Kinshasa AZAP in French 1700 GMT 12 Jun 78 LD/EA]

CSO: 5400

MINISTER MALECELA REPORTS ON LOCUST SWARMS IN HORN, NORTHEAST AFRICA

Appeals For Aid

London THE GUARDIAN in English 12 Jun 78 p 7 LD

[Article by Martha Oney]

[Text] Dar es Salaam--Mr John Malecela, chairman of the Desert Locust Control Organisation for Eastern Africa, appealed for international aid yesterday to fight swarms of locusts in the Horn of Africa. "The situation is really dangerous," Mr Malecela said, "and cannot be controlled by our organisation alone."

Mr Malecela, who is also Tanzania's minister for agriculture, has just returned from an inspection tour of the locust-infested areas. He reported that 43 swarms have been spotted in Ethiopia and 17 in Somalia, most between 10-40 square miles each. "At times the locusts were so thick our pilot could not see out the windscreen of the plane," Mr Malecela said. "In areas which had been sprayed I saw millions of dead locusts on the ground."

He emphasized there was a grave danger that the locusts--each square mile of which eat 14 tons and travel more than 100 miles a day--will move into East Africa. "Now is the breeding season," he said. "Millions of new locusts will hatch in August and September. Then towards the end of the year, when the monsoon winds start blowing south, it will be very easy for the locusts to be brought into northern Kenya and Tanzania."

Mr Malecela said his organisation--which represents Tanzania, Kenya, Uganda, Ethiopia, Sudan, Somalia and Djibouti and has its headquarters in Addis Ababa--had drawn up a list of specific requests they must receive within the next two months from the international community. These include 60 four-wheel drive vehicles, 50 lorries, 60 ground-to-air radio communication sets, 100 sets of camping equipment, 130,000 litres of various insecticides and \$1 million "to enable us to run the equipment and pay for additional supplies and staff."

### Talks Set With UNFAO

Dar es Salaam in English 1600 GMT 13 Jun 78 LD/EA

[Text] Dar es Salaam--The UNFAO [United Nations Food and Agriculture Organization] is bringing a team of experts to Dar es Salaam for talks on how to combat the locust threat in the Horn of Africa. Ndugu John Malecela, the minister for agriculture, who is also chairman of the Desert Locust Control Organization for East and Central Africa, has said the talks will cover mobilizing international resources to control the threat. He said officials from the desert locust control headquarters in Addis Ababa will also attend the Dar es Salaam talks.

On Sunday, Ndugu Malecela called for urgent international aid to combat the locust outbreak now threatening Ethiopia with famine. The minister said 60 swarms located in Ethiopia and Somalia measured 10 to 40 square miles each, and threatened to spread into Kenya and Tanzania.

### Control Chief Urges Aid

Addis Ababa Domestic Service in English 1015 GMT 9 Jun 78 LD/EA

[Text] The Tanzanian agriculture minister and current chairman of the Desert Locust Control Organization for East Africa, Mr John Malecela, left Addis Ababa today after completing a weeklong assessment of the present locust swarm invasion in East Africa, including Ethiopia, Djibouti and Somalia.

In a statement at Bole International Airport, Dr Malecela said that during his weeklong visit he had observed that the present locust swarm invasion of the three countries is very serious. He called on the international community to give immediate assistance to solve the problem (?without delay).

### First Alert in Kenya

Belgrade TANJUG in English 1704 GMT 5 Jun 78 LD

[Text] Nairobi, 5 June, TANJUG--The first alert was sounded in Kenya, Tanzania, Uganda and other countries in East Africa this morning in (?preparation) for a possible swarm-migration of locusts, the largest-scale one in these countries in recent years.

Kenya's Ministry of Agriculture sent cropduster planes and teams to the north-eastern province of Granino this morning with the task of spraying several hundred square km.

In the meantime according to reports reaching here from Ethiopia and Somalia, swarms of locusts are already stripping vegetation from large areas in these two countries.

Should a synchronized campaign by special services in Kenya, Tanzania and Uganda fail to stop the invading swarms from migrating farther, all of agriculture in these countries would come under an immediate threat.

#### Somali Minister Briefs FAO

Mogadiscio Domestic Services in Somali 1115 GMT 1 Jun 78 LD

[Summary] Somali minister for agriculture, Col Ahmad Hasan Musa, and the delegation he is leading met with FAO officials this morning at Burao. The minister briefed the officials on problems which had occurred in some parts of the country and said that the government was determined to eradicate problems caused by locusts. The minister and his delegation are touring agricultural areas affected by locusts.

#### Locust Damage in Ethiopia

Addis Ababa Domestic Service in Amharic 0500 GMT 4 Jun 78 LD/EA

[Test] The Gondar Regional Agricultural and Settlement Office has disclosed that swarms of locusts have been sighted in all the seven districts of the region and are damaging crops. The office has said that the swarms of locusts began their invasion of the seven districts last week. It added that it has sent a telegram to the appropriate department asking for medical facilities and more workers since it could not combat the swarms alone.

The director of the regional agricultural and settlement office stated that since it is necessary to build airfields in strategic places to conduct operations, an airfield has been built in the town of Dabra-Tabor at the center of Gayint, Dabra-Tabor and Libo districts.

#### Kenya Informs of Danger

Nairobi Domestic Service in English 1400 GMT 12 Jun 78 LD/EA

[Text] The minister for water development, Dr Gikonyo Kiano, has said that concerted efforts by both national and international organizations should be mounted immediately to combat the source of locusts that is currently ravaging vast regions of Ethiopia. Addressing a 6-day seminar on desertification and problems of semiarid zones at the Goethe Institute in Nairobi today, Dr Kiano warned that unless urgent measures were taken, Kenya's efforts to combat desertification would be frustrated and millions of wananchi would be plunged into untold misery. The minister told participants that they were discussing a vital subject affecting the welfare of mankind both present and future.

He said that the disastrous effects of desertification were being felt in those areas in Africa bordering the southern belt of the Sahara. He stressed that wananchi should be made aware of the factors that led to desertification and be educated in ways and means of helping combat desertification.

The workshop seminar is being attended by officers from four ministries-- Office of the President, Ministry of Information and Broadcasting, Ministry of Natural resources and the Ministry of Water Development. The German ambassador to Kenya, Dr Heimsoeth, who welcomed the minister, reiterated his country's determination to cooperate with Kenya in her development efforts.

CSO: 5400

KENYAN, ETHIOPIAN ANTI-LOCUST MEASURES

Nairobi DAILY NATION in English 27 Jun 78 p 4

[Text]

KENYA is prepared to thwart any invasion by desert locusts from the north and north-east.

According to Mr. J. Adamba of the Ministry of Agriculture, the chairman of an inter-Ministerial team appointed by the Government to make preparations for a possible invasion, the locusts have not so far entered Kenya. "But should they come, they will be fought from land and air," he said.

Mr. Adamba and his team yesterday met district heads of department in Wajir. He said two aircraft, several vehicles, spraying equipment and insecticides had been made available at six field stations in the area.

He added that Wajir would act as a "storage station" in the fight against locusts.

## Swarms

Meanwhile, a total of 50 swarms have been reported in the last six weeks in seven Ethiopian provinces, the Desert Locust Control Organisation for Eastern Africa (DLCOEA), says in a report.

Twenty-one of these swarms were intercepted and controlled by aerial spraying, it said.

In April extensive ground operations were conducted against all stages of hopper bands and fledglings, mainly between Dowale and Aisha.

A senior DLCOEA official suggests that areas with initial hopper concentrations be given special attention to curb any further breeding.

The organisation has confirmed that the advancing locust swarms in Ethiopia, Djibouti and Somalia are being checked by ground and aerial spraying.

However, several swarms have moved into Takazza and Awash areas. "It is almost certain that there is going to be a further generation of swarms," the report said.

— NATION Reporter and KNA

CSO: 5400

INTER-AFRICAN AFFAIRS

LOCUST INVASION FROM ETHIOPIA

Nairobi DAILY NATION in English 28 Jun 78 p 21

[Text]

DESERT Locusts may invade Kenya through Mandera from southern Ethiopia late this year or early next year, an official of the Ministry of Agriculture, Mr. J. Adamba, said yesterday.

Mr. Adamba who is head of the committee on desert locust control, said precautionary measures were being taken to control the locusts, adding that Mandera would be the nucleus of operations.

Mr. Adamba denied earlier reports that desert locusts had been spotted at Elwak and Garissa, and said that they had not invaded Kenya so far.

The official said training on identification of the locusts was being carried out.

He urged provincial administration officials to educate wananchi on the threat posed by the locusts.

Mr. Adamba urged the security committee to check all airstrips if the exercise was to be effective.

He also called for improved radio-call facilities at the airstrips.

Mandera DC Mr. N. Njuguna told the delegation that DO's and chiefs had been instructed to hold barazas to educate the people on the dangers posed by desert locusts.

CSO:

## BRAZIL

### NEW DISEASE REPORTED INFECTING COFFEE PLANTATIONS

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 22 Jun 78 p 34

[Text] A new type of disease is attacking Brazilian coffee plantations, the IBC [Brazilian Coffee Institute] announced yesterday. It is an anthracnose of the coffee bean known in Africa as CBD, or coffee berry disease. It was initially detected on a plantation in Ouro Fino, Minas Gerais. However the problem has been under study at the IBC, which is working with the Biological Institute, since the middle of 1977.

The first cases were noted by agronomical engineer Durval Rocha Fernandes, of the IBC technical team, who found some darkened coffee beans falling from the plants. In a sampling of berries sent to an expert in Holland for analysis, a pathogenic variety of the fungus causing the disease, *colletotrichum coffeanum*, was identified.

A more detailed study revealed that this disease has a high incidence in Africa, or more specifically in Kenya, at altitudes above 1700 meters, and under low temperature conditions. In warmer areas, it does not become epidemic.

According to IBC technicians, it is presumed that only the areas in Brazil at an altitude of more than 1200 meters provide conditions for the development of the fungus, and even so, the disease would be confined to coffee beans formed in the colder months, representing a small portion of the harvest. Currently, a program involving technical cooperation between the IBC and the French Coffee and Cacao Institute is being developed. Other participants include the Agronomical Institute and the Biological Institute in Sao Paulo, together with Kenyan and Dutch research bodies.

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CSO: 5400



INDIA

#### PREPARATIONS FOR LOCUST MENACE OUTLINED

Calcutta THE STATESMAN in English 15 Jun 78 p 7

[Text] The plant Protection Organization of the Government of India have swung into action to face the locust menace in Gujarat, reports PTI.

Reports of locust swarms sighted in Banaskanta district and the adjoining areas have been received by the Government.

According to an official handout, the plant protection adviser, who is also the director of locust control operations, is visiting the affected areas along with the Director of Agriculture Aviation to organize an intensive ground-cum-aerial operation to contain the locust threat.

The Gujarat Government has been asked to monitor the situation on a day-to-day basis and keep the Centre and the States of Maharashtra, Madhya Pradesh, Rajasthan, Haryana and Punjab informed.

UNI adds: Small groups of locusts sighted near Rajkot and the adjoining areas of Saurashtra may be part of a single swarm "brought by chance" across the Arabian Sea from its African breeding place by the changed wind patterns, according to a spokesman of the Union Agriculture and Irrigation Ministry.

The appearance of locusts at this time is a rare occurrence. The spokesman ruled out any need to be panicky over the situation, Spraying operations have been started by the Ministry in Rajkot, Junagarh and Amreli to kill the insects. If needed, the Ministry's locust control units, permanently stationed in the Indo-Pakistani desert region may press aircraft into service for spraying pesticides.

However, if the monsoon is erratic, there may be the danger of some insects breeding and going into the cultivated areas. Once the monsoon sets in, the spraying operations may prove to be difficult and ineffective.

CSO: 5400

## INDIA

### BRIEFS

LOCUST OPERATIONS--In Gujarat, spraying operations have been launched by the Ministry of Agriculture and Irrigation to kill small groups of locusts gathering in the last few days around Rajkot and adjoining areas of Maharashtra. In New Delhi the ministry spokesman has said that there is no need to be panicky over the appearance of these small groups. He said the locusts seem to have come across the Arabian Sea from their African breeding places. The Haryana Government has alerted its Pest Control Field Staff to be ready with equipment for fighting any locust swarm if it enters the state from Gujarat. Ground spraying has been ordered in the four susceptible districts of Tirsa, Mohindragarh, Bhiwani and Gurgaon. [Delhi Domestic Service in English 0630 GMT 14 Jun 78 BK] The swarms of locusts, which descended over several villages of Gujarat State, have now flown toward Rajasthan. A press release of the Palampur Agricultural Office said that timely precautions have prevented much damage to the crop. [Delhi General Overseas Service in English 1000 GMT 18 Jun 78 BK]

LOCUSTS IN GUJARAT, HARYANA--In Gujarat, the locust menace has been brought under control in the Kutch District. Antilocust operations are in full swing. [Delhi General Overseas Service in English 1000 GMT 27 Jun 78 BK] In Haryana, the presence of a locust swarm has been reported from four villages. The swarm is spread over an area of 3 square kilometers. Two aircraft have been placed into service for aerial spraying. [Delhi Domestic Service in English 1230 GMT 27 Jun 78 BK]

LOCUST SWARM MOVEMENT--According to reports reaching Chandigarh, the locust swarm in Rajasthan moving toward Haryana is now about 35 kilometers from the state's border. The director of the swarm remains, as before, toward the districts of Mohindergarh and Bhiwani. Meanwhile the Desert Locust Control Organization for Eastern Africa has said that advancing locust swarms in Ethiopia, Djibouti and Somalia have been checked by aerial spraying. [Text] [Delhi Domestic Service in English 0240 GMT 25 Jun 78 BK]

LOCUST CONTROL IN GUJARAT--In the Saurashtra region of Gujarat, four swarms of locusts have been sighted at several places in Rajkot, Junagadh and Amreli districts. A spokesman of the State Agricultural Department said that locust control operations are in progress in these areas. [Text] [Delhi Domestic Service in English 1530 GMT 12 Jun 78 BK]

## JAMAICA

### SMUT TO CAUSE SUGARCANE PRODUCTION LOSSES FOR 3 YEARS

Kingston DAILY GLEANER in English 24 Jun 78 p 6 FL

[Report by R. A. Burgoss, assistant director of the Sugar Industry Research Institute [SIRI] in Sugarcane]

[Text] Smut is likely to begin to cause some yield losses in 1978, and in 1979 and 1980 crops the more adverse effects of the disease will become manifest. Because we have come through 1977 with no discernible yield losses, growers may be tempted to underestimate the seriousness of disease.

The fact is, however, that if smut is not properly attended to, it can reduce yields to as low as 5 tons per acre within 3 years of its first appearance in a field of hj5741.

Experience in the southern Caribbean has shown that once the disease reaches the 1,000 whip per acre level in one crop, then in the succeeding crop a yeild loss of around 20 percent can be expected in the following year. If such a field were to be carried through for another year its yield could be around 5 tons per acre.

There are a few fields in Jamaica which had reached the 1,000 whip level by the end of 1977 (growers have been individually advised to plough these out). In 1978, a much larger percentage of hj5741 fields would be expected to show such or higher infection levels. Therefore, quite serious yield losses in some fields of this variety can result in the 1979 crop, unless they are ploughed out during this year. For example, a field which in 1978 has a 1,000 whip per acre count and yields 30 tca, may, in 1979, be expected to give as little as 24 tca and in 1980 the yield may be 0-10 tons per acre. The obvious and most serious economic consequences of such direct yield losses need no further emphasis.

We must now concentrate on putting into effect all the measures by which such losses may be reduced or avoided.

In general terms, in order to minimise the ill effects of smut, growers must in this year of 1978 redouble all efforts for the control and containment

of the disease. The reason is that smut spores are now present in tremendous quantity and are widespread. Young cane is more susceptible than older cane, and from now to year-end there will be a lot of young cane sprouts all over Jamaica. However, if recommended control measures are followed, then the very serious yield losses from the disease can be considerably checked.

The three basic recommended control measures which must be consistently followed are as follows:

1. Find the disease by regular surveys.
2. Get rid of infected canes by roguing on a regular and consistent schedule.
3. Replant the susceptible varieties, hj5741 and b49119, with resistant varieties.

#### Thorough Surveys

Early detection of diseased fields is a most important predeterminant of the effectiveness of other control measures. The disease can only be detected in its early stages by regular, thorough and systematic searches of all fields on a farm. During 1977, information on survey methods was provided by SIRI extension officers. Should there be any doubt or questions about the way to go about finding smut, please contact the SIRI extension officer in your area.

CSO: 5400

KENYA

LOCUSTS IN ELWAK AREA

Nairobi DAILY NATION in English 21 Jun 78 p 3

[Text]

SWARMS of desert locusts have been spotted in the Elwak area of Mandera District. Experts say action is being taken to control them.

It is believed the locusts may have originated in eastern Somalia. A sample of the Elwak locusts is already under observation at the local agricultural office, District Officer Mr. H.C. Wamubeyi said yesterday.

He stated that the locusts had earlier been dismissed as grasshoppers "but it is now confirmed that they are desert locusts".

He advised DOs and chiefs to inform wananchi to report any traces of locusts to the authorities for necessary action.

Mr. Wamubeyi said officials from Nairobi were already on their way to Elwak to assess the situation.

CSO: 5400

KENYA

## LOCUSTS IN SAMBURU DISTRICT

Nairobi DAILY NATION in English 21 Jun 78 p 32

[Text]

**NDOTO** Location acting chief Mr. Thomas Lekisat says he has located a swarm of locusts at Surante Baragoi, Samburu District.

A range officer, Mr. Kinyanjui, has investigated the situation and said the locusts are in their early stages.

The officer found the locusts on the leaves of trees, along the road, stretching for about 10 km. Local people interviewed said the insects had not been seen since 1954. Some locusts have been taken to Kabete laboratory for study.

A team of Ministry of Agriculture experts sent to investigate locusts yesterday reported that they had only found tree locusts and not desert locusts.

According to the Deputy Secretary in the Ministry, Mr. David Wanjuki, the team, which was led by Mr. J. Adambo, visited El Wak, Mandera and surrounding areas.

Another official in the Ministry reminded the farmers that tree locusts are not a threat to them. "We only fear invasion by desert locusts," he said.

A spokesman at the Desert Locust Control Organisation for Eastern Africa said they had not received any reports of the locusts having been seen on Kenya's north-eastern borders.

CSO:

## KENYA

### LOCUST-FIGHTING TASK FORCE

Nairobi DAILY NATION in English 16 Jun 78 p 36

[Text]

KENYA plans to form a task force to fight any invasion of desert locusts.

This was said yesterday by Assistant Minister for Agriculture Mr. Vincent arap Too when he met officials of the Food and Agriculture Organisation who visited Eastern Africa to assess the locust situation.

The FAO experts, Dr. Oscar Braner and Dr. Jean Roy, and the director-general of the Desert Locust Control Organisation of Eastern Africa (DLCOE), Mr. Adefris Bellehu, said unless swarms of locusts in Ethiopia and Somalia were destroyed now they would arrive in Kenya by December or January.

The locusts were now breeding in the Ethiopian Rift Valley, they said, and it would take at least six months to destroy the entire locust population.

They said the locust menace was intensified by the Ogaden war which prevented the control organisation from destroying the locusts at breeding stage.

Mr. Bellehu said the DLCOE was too small to combat the problem alone. It needed equipment

enabling them to go into inaccessible area.

They needed 50 lorries, 60 Land-Rovers or similar vehicles, 100 camping set equipment, ground-to-air radio equipment and about 100,000 litres of insecticides.

FAO has sent equipment worth about Sh. 7.2 million.

The British government has also given aid worth Sh. 14.4 million. It had given two Islander aircraft for spraying and two others were being built. Sixteen Land-Rovers and a locust adviser had also been provided.

In Dar es Salaam, Mr. Bellehu said the number of swarms sighted in Ethiopia had reached 50, seven up on the previous estimate.

He said 17 swarms had been sighted in Somalia.

He told a news conference the swarm near Addis Ababa was 29 km. square. It is estimated that such a swarm would consume 250 tons of crops a day.

Mr. Bellehu discussed with officials from FAO and Tanzanian Agriculture Minister John Male ways to deal with the locusts.

CSO: 5400

## SAUDI ARABIA

### BRIEFS

LOCUST SWARMS--Jeddah, June 5--Locust swarms have invaded the Kingdom four times this year, according to a report of the Jeddah-based Agricultural Research Center. The report, quoted by 'AL-MEDINA' newspaper Monday, said that since the beginning of the agricultural season four separate infestations of locusts had attacked crops in Jizan, the Red Sea coast south of Jeddah, Najran, Asir and the Central Province. Jizan was the first area hit, the report said, when waves of locusts from breeding grounds across the Red Sea in East Africa massed simultaneously in the Jizan area and the Yemens. Crop-spraying teams were despatched by the center and the Ministry of Agriculture and Water and were successful in eradicating the pests. The next invasion was, however, less localized. Millions of young locusts from the first swarm moved north into the Kingdom, infesting the Asir region and penetrating to the heart of the Central Province, where they have again proliferated. Separate waves have crossed the Red Sea from East Africa and infested coastal regions between Al-Lith and Qunfudha. The OPEC correspondent of the Associated Press reported in early May seeing swarms 'like green snow' feeding as far inland as the Mecca-Taif road. The center reports, however, that the locusts have been eliminated in the Qunfudha area and the danger is almost passed in Al-Lith. Meanwhile the eradication teams are still fighting locusts from the south-eastern peninsula and the Empty Quarter now infesting Najran. [Text] [Jiddah ARAB NEWS in English 6 Jun 78 p 4]

CSO: 5400



SUDAN

LOCUST EXTERMINATION CARRIED OUT IN RED SEA PROVINCE

Khartoum SUNA DAILY BULLETIN in English 20 Jun 78 pp 9-10

[Article: "Locust Threatens Sudan"]

[Text] Wad Medani, June 20, (SUNA) - The State Minister of Agriculture, Dr Mohamed El Shazali Osman has declared that there is a threatening danger of a great locust creep that would cover 250 thousand square miles of African territories including the Sudan.

He added that reports indicate the presence of locust in neighboring countries.

The Food and Agriculture Organization (F.A.O.) has donated \$250,000 for purchasing insecticides for Sudan, he declared.

The locust combat equipment donated by F.A.O. has been shipped to Sudan.

The Federal Republic of Germany has also allocated 2 million marks to purchase locust combat equipment for the Sudan.

A report by the Plant Protection Administration has noted that the Tokar Delta area has witnessed intensive locust combat operations during the last 3 months but the political situation in the Horn of Africa has hindered conducting an integrated campaign against locusts.

Operations against locusts are now underway in Saudi Arabia and Somalia, but the danger is not over yet.

The report also reveals that all the necessary preparations have been made and the insecticides have been distributed to the strategic centers. The Commissioners of the provinces receive successive reports on the situation.

CSO: 5400

VIETNAM

AGRICULTURE COMMUNIQUE NOTES NATIONWIDE INSECT DAMAGE TO CROPS

Hanoi Domestic Service in Vietnamese 0400 GMT 10 Jun 78 BK

[Text] According to a communique issued by the Department for Plant Protection subordinate to the Ministry of Agriculture, over the past 10 days, brown planthoppers have caused damage in some localities such as Ha Son Binh, Thai Binh and Hai Hung provinces, Haiphong city, and so forth.

After the rains at the beginning of the month, the planthoppers multiplied so quickly that they reached a density of 10,000 to 20,000 per square meter, or even 40,000 to 50,000 per square meter in some areas. They also damaged some spring-summer rice areas in Ben Tre, Tien Giang, Cuu Long and Hau Giang provinces.

Besides brown planthoppers and moths, a third scourge of yellow rice stem borers has appeared in some northern provinces. In particular, rice seedlings and rice plants in Region 4 and the southern provinces have been affected by insect larvae. Rice head blast still exists in Region 4 and the delta provinces. In some localities, 30 percent of the ricefields have been affected. Green scaling worms developed on [words indistinct] then density of 300 flies per square meter. The density of stem borers on the corn areas in Thanh Hoa and Nghe Tinh provinces is three to six worms per square meter.

In the 10 days ahead planthoppers, moths and yellow rice stem borers will continue to appear in large numbers and brown planthoppers will continue to cause damage to crops in the northern provinces; rice army worms and paddy hesperids will cause heavy damage to many areas, and green scaling worms will continue to increase and brown planthoppers will continue to damage rice plants in the southern provinces. In particular, in the coastal provinces in Region 5, moths and yellow rice stem borers will appear in large quantities from the middle of June onward.

All localities must promptly and comprehensively harvest the 5th-month spring rice to reduce the losses caused by brown planthoppers and rice blast, while taking measures to prevent and eliminate insects harmful to rice seedlings. The southern provinces must promptly eliminate all pockets of brown planthoppers. The coastal provinces in Region 5 must pay attention to eradicating moths and yellow rice stem borers.

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Punchline



**"That's all we  
need — Cuban  
trained  
locusts."**